

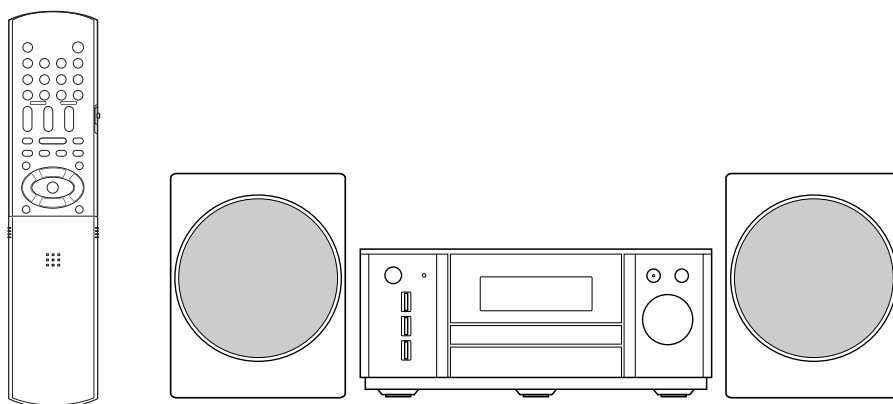
JVC

English

COMPACT COMPONENT SYSTEM

EX-A3

Consists of CA-EXA3 and SP-EXA3



MPEG-4
ASF PLAYBACK

Hybrid Feedback
Digital Amplifier



INSTRUCTIONS

For Customer Use:

Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No. _____

Serial No. _____

LVT1630-002A
[J, C]

Warnings, cautions and others

(For U.S.A.)

 CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN 	 ATTENTION RISQUE D'ÉLECTROCUTION NE PAS OUVRIR 
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	ATTENTION: POUR ÉVITER TOUT RISQUE D'ÉLECTROCUTION, NE PAS OUVRIR LE BOÎTIER. AUCUNE PIÈCE INTÉRIEURE N'EST À RÉGLER PAR L'UTILISATEUR. SE RÉFÉRER À UN AGENT QUALIFIÉ EN CAS DE PROBLÈME.
 The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.	 Le symbole de l'éclair à l'intérieur d'un triangle équilatéral est destiné à alerter l'utilisateur sur la présence d'une "tension dangereuse" non isolée dans le boîtier du produit. Cette tension est suffisante pour provoquer l'électrocution de personnes.
 The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.	 Le point d'exclamation à l'intérieur d'un triangle équilatéral est destiné à alerter l'utilisateur sur la présence d'opérations d'entretien importantes au sujet desquelles des renseignements se trouvent dans le manuel d'instructions.

(For U.S.A.)

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

(For U.S.A.)

INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Changes or modifications not approved by JVC could void the user's authority to operate the equipment.

(For U.S.A.)

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

For Canada/pour le Canada

THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS AS SET OUT IN THE INTERFERENCE-CAUSING EQUIPMENT STANDARD ENTITLED "DIGITAL APPARATUS", ICES-003 OF THE DEPARTMENT OF COMMUNICATIONS.

CET APPAREIL NUMERIQUE RESPECTE LES LIMITES DE BRUITS RADIOELECTRIQUES APPLICABLES AUX APPAREILS NUMIRIQUES DE CLASSE B PRESCRITES DANS LA NORME SUR LE MATERIEL BROUILLEUR: "APPAREILS NUMERIQUES", NMB-003 EDICTEE PAR LE MINISTRE DES COMMUNICATIONS.

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

1. Do not remove screws, covers or cabinet.
2. Do not expose this appliance to rain or moisture.

ATTENTION

Afin d'éviter tout risque d'électrocution, d'incendie, etc.:

1. Ne pas enlever les vis ni les panneaux et ne pas ouvrir le coffret de l'appareil.
2. Ne pas exposer l'appareil à la pluie ni à l'humidité.

CAUTION — ϕ/I button!

Disconnect the mains plug to shut the power off completely (the STANDBY lamp goes off). When installing the apparatus, ensure that the plug is easily accessible.

The ϕ/I button in any position does not disconnect the mains line.

- When the system is on standby, the STANDBY lamp lights red.
- When the system is turned on, the STANDBY lamp goes off.

The power can be remote controlled.

ATTENTION — Touche ϕ/I !

Déconnectez la fiche secteur pour mettre l'appareil complètement hors tension (le témoin STANDBY s'éteint). Lors de l'installation de l'appareil, assurez-vous que la fiche soit facilement accessible.

La touche ϕ/I , dans n'importe quelle position, ne déconnecte pas le système du secteur.

- Quand le système est en attente, le témoin STANDBY est allumé en rouge.
- Quand le système est sous tension, le témoin STANDBY s'éteint.

L'alimentation peut être télécommandée.

IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. **CAUTION:** Do not open the top cover or cabinet. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. **CAUTION:**
(For U.S.A.) Visible and/or invisible class II laser radiation when open. Do not stare into beam.
(For Canada) Visible and/or invisible class 1M laser radiation when open. Do not view directly with optical instruments.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED INSIDE THE UNIT.

IMPORTANT POUR PRODUITS LASER

1. PRODUIT LASER CLASSE 1
2. **ATTENTION:** N'ouvrez pas le couvercle supérieur ni le coffret de l'appareil. Il n'y a aucune pièce réparable par l'utilisateur à l'intérieur de l'appareil; confiez toute réparation à un personnel qualifié.
3. **ATTENTION:**
(Pour les Etats-Unis) Radiation laser de classe II visibles et/ou invisible si l'appareil est ouvert. Ne regardez pas le rayon.
(Pour le Canada) Rayonnement laser visible et/ou invisible de classe 1M une fois ouvert. Ne pas regarder directement avec des instruments optiques.
4. REPRODUCTION DE L'ÉTIQUETTE: ÉTIQUETTE DE PRÉCAUTION PLACÉE À L'INTERIEUR DE L'APPAREIL.

CAUTION VISIBLE AND/OR INVISIBLE CLASS 1M LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1:2001 (ENG)	ATTENTION RAYONNEMENT LASER VISIBLE ET/OU INVISIBLE DE CLASSE 1M UNE FOIS OUVERT. NE PAS REGARDER DIRECTEMENT AVEC DES INSTRUMENTS OPTIQUES. (FRA)	AVISO RADIACIÓN LASER DE CLASE 1M VISIBLE Y/O INVISIBLE CUANDO ESTÁ ABIERTO. NO MIRAR DIRECTAMENTE CON INSTRUMENTAL ÓPTICO. (ESP)	VARNING SYNLIG OCH/ELLER OSYNLIG LASERSTRÅLNING. KLASS 1M, NÄR DENNA ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN MED OPTISKA INSTRUMENT. (SWE)	注意 ここを開くと可視 及び/または不可視 のクラス1M レーザー放射が 出ます。 光学装置で直接 見ないでください。 (JPN)	CAUTION VISIBLE AND/OR INVISIBLE CLASS II LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA 21 CFR (ENG) LV44603-003A
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[European Union only]
[Union européenne seulement]

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Thank you for purchasing a JVC product.

Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

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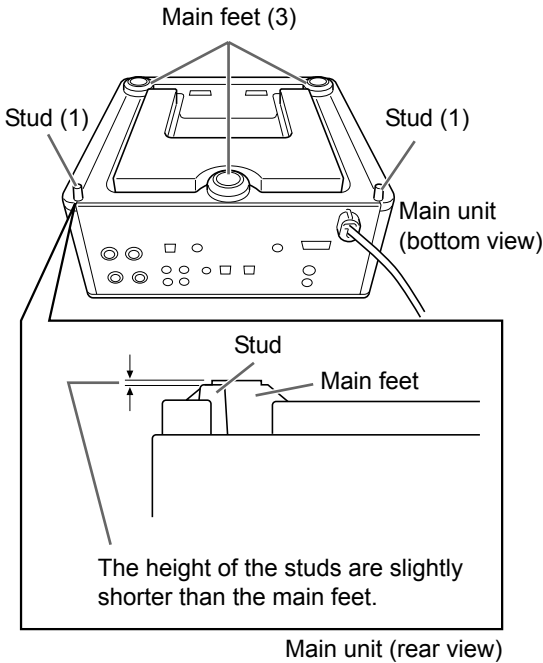
How to read this manual

- This manual explains the operations assuming that you will use the remote control. Some buttons on the main unit are the same as those on the remote control. You can use either button in this case.
- Some diagrams in this manual are simplified or exaggerated for the purpose of explanation.
- You can operate some functions differently from the explanation given in this manual.
- Depending on the disc/file, you may not obtain the explained result even after following the operation in this manual.
- The following marks refer to the usable discs/files for the explained function.

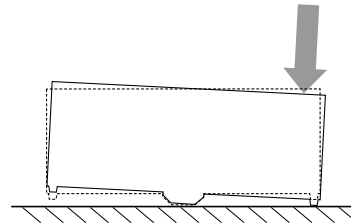


Features of the main feet and studs

The use of three main feet on the bottom of the main unit enables higher sound quality while maintaining the stability of the main unit.

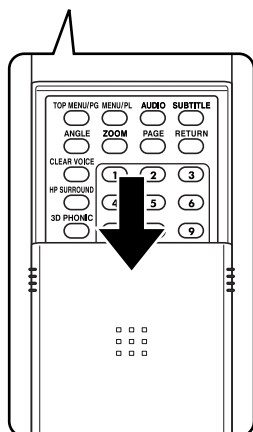
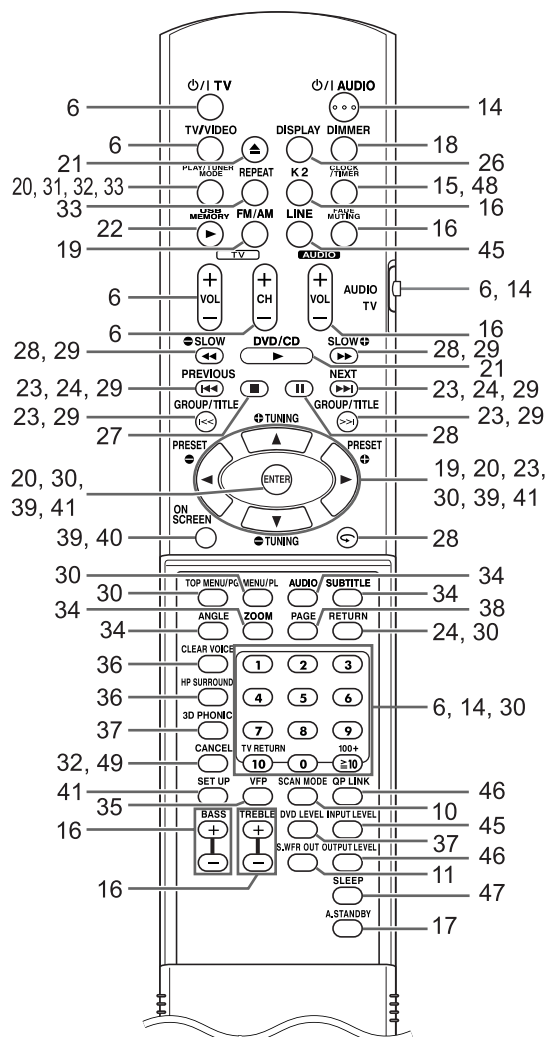


In addition, the two studs on the bottom help stabilize the main unit and prevent it from wobbling or tipping when nudged from above. Because the studs are slightly shorter than the main feet, the studs do not come in contact with the mounted surface, leaving the main feet to support the main unit.

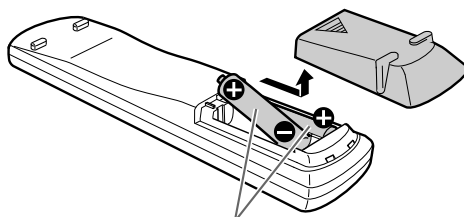


Using the remote control

The numbers refer to the pages in which the parts are explained.



Inserting the batteries into the remote control



R6P (SUM-3)/AA (15F) type dry-cell batteries (supplied)

- If the effective range of the remote control decreases, replace both batteries.

CAUTION

- Do not expose batteries to heat or flame.

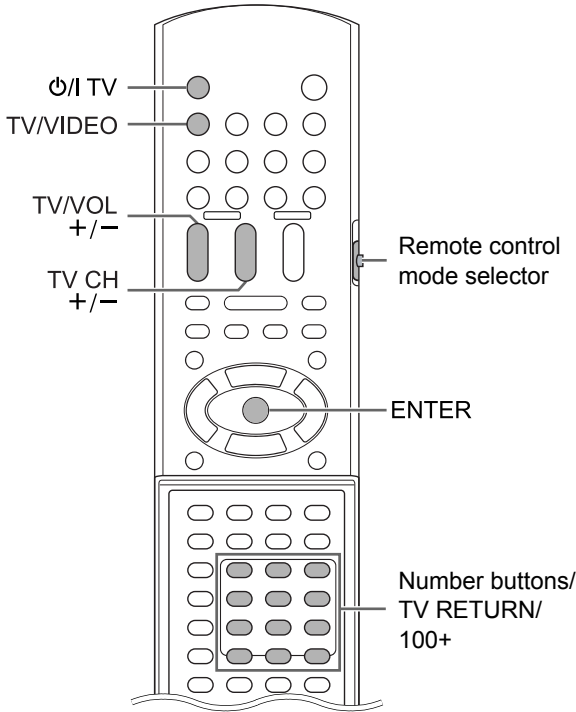
Operating the system from the remote control

Point the remote control directly at the front of the main unit.

- Do not block the remote control sensor on the main unit.

Operating a TV using the remote control

You can operate your TV using the remote control of this system.



Setting the manufacturer code

- 1 Slide the remote control mode selector to [TV].**

- 2 Hold down [P/I TV].**
 - Hold down [P/I TV] until you finish step 4.
- 3 Press [ENTER] and release.**
- 4 Press the number buttons to enter the manufacturer code.**

Examples:

For a Hitachi TV: Press [1], then [0].

For a Toshiba TV: Press [0], then [8].

When the manufacturer of your TV has two or more codes, select the manufacturer codes in turn and find the one that operates the TV and the remote control properly.

Manufacturer	Code	Manufacturer	Code
JVC	01	Samsung	12
Hitachi	10	Sanyo	13
Magnavox	02	Sharp	06
Mitsubishi	03	Sony	07
Panasonic	04, 11	Toshiba	08
Philips	14	Zenith	09
RCA	05		

5 Release [P/I TV].

NOTE

- Manufacturer codes are subject to change without notice. You may not be able to operate the TV produced by the manufacturer.
- After replacing the batteries of the remote control, set the manufacturer code again.

Using the remote control for the TV operation

Operate the remote control by pointing it at the TV.

Remote control button	Usage	
[P/I TV]	Turns on/off the TV.	
[TV/VIDEO]	Changes between the TV and video input.	
[TV CH +/-]	Changes channels.	
[TV VOL +/-]	Adjusts volume.	
Number buttons (1-9, 0, 100+)	Slide the remote control mode selector to [TV] in advance.	Selects the channels.
[TV RETURN]		Changes between the previously selected channel and the current channel.

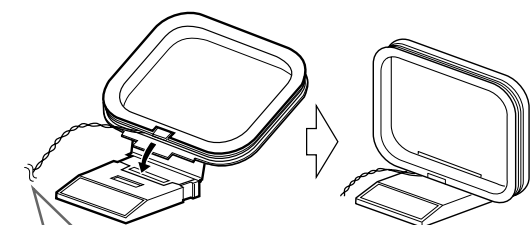
Preparation

Do not turn on the power until you complete the connection.

Connecting the antennas

AM loop antenna (supplied)

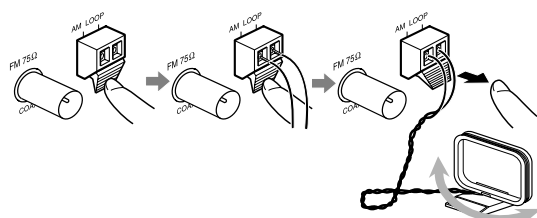
Setting up the AM loop antenna



If insulation covers the tips of the antenna cable, twist and pull off the insulation.

Connecting the AM loop antenna

Main unit (rear view)



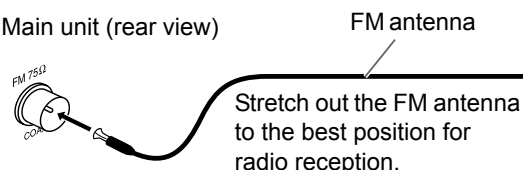
Turn the AM loop antenna to find the best position for radio reception.

NOTE

- Make sure that the antenna conductors do not touch any other terminals. This could cause poor reception.

FM antenna (supplied)

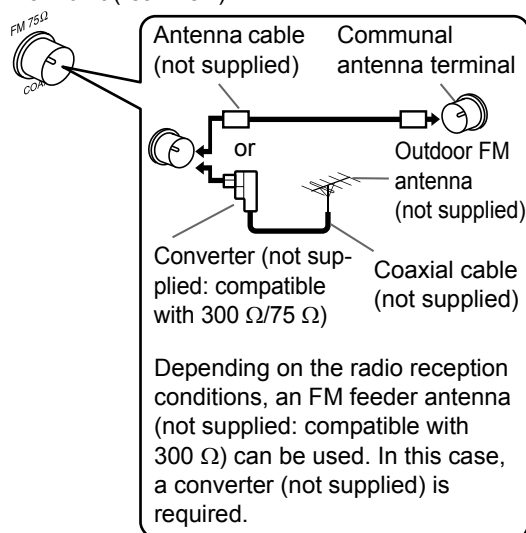
Main unit (rear view)



Stretch out the FM antenna to the best position for radio reception.

When radio reception with the supplied FM antenna is poor, or when using a communal antenna

Main unit (rear view)



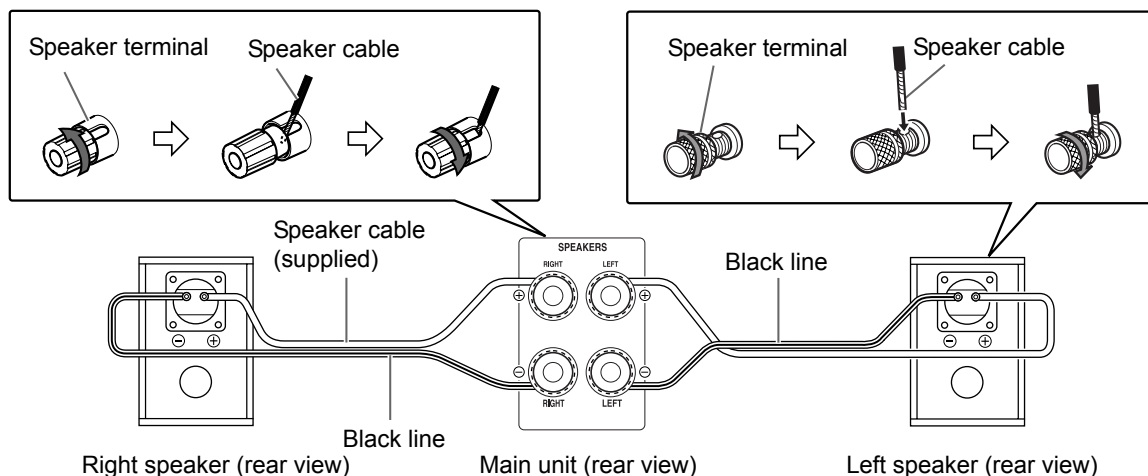
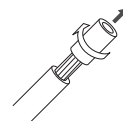
When using an antenna other than those supplied with this system, refer to the operation manuals for the antenna and converter for details of connection.

When positioning the antennas, find the best position for reception while listening to an actual radio program (refer to "Listening to radio broadcasts" on page 19).

Connecting the speakers

The left and right speakers are the same.

Before connecting the speaker cables, twist and pull off the insulation at the end of each speaker cable.



■ IMPORTANT

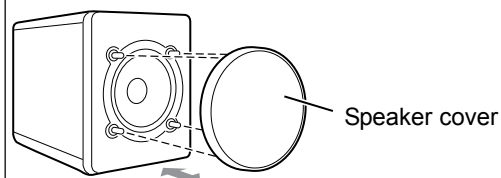
- Improper speaker cable connection reduces the stereo effect and sound quality.
- The supplied speakers are magnetically shielded, but color irregularity may occur on the TV depending on some conditions. To prevent color irregularity, set up the speakers following the instructions below.
 1. Turn off the main power of the TV before setting up the speakers.
 2. Place the speakers enough distance from the TV so that they do not cause color irregularity on the TV.
 3. Wait for approximately 30 minutes before turning on the main power of the TV again.

The speakers employ natural wood for the diaphragm and the cabinet in order to reproduce the original sound faithfully. The appearance therefore differs for each system.

CAUTION

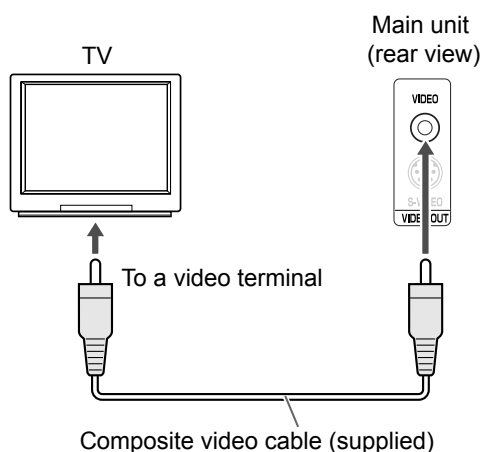
- Do not short-circuit the $\oplus$ and $\ominus$ speaker terminals. Doing so may damage the main unit.
- The impedance of speakers connected to the main unit must be within the range of $4\ \Omega$ to $16\ \Omega$.
- Do not connect other speakers together with the supplied speakers. The change in impedance may damage the main unit and the speakers.

You can detach the speaker cover.

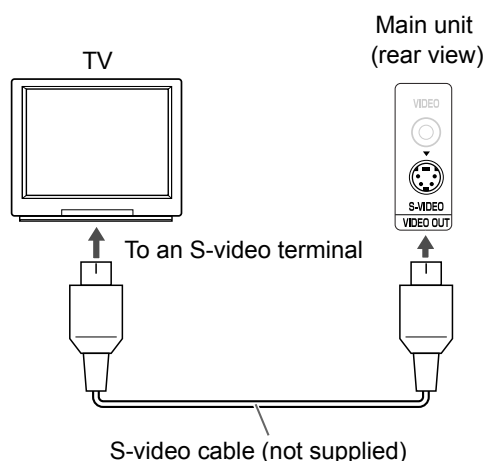


Connecting a TV

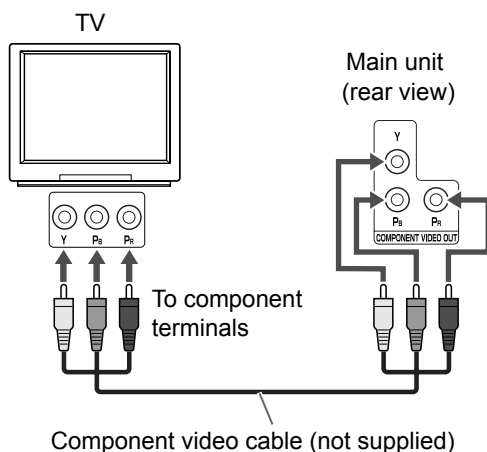
Connecting a TV with the [VIDEO] terminal



Connecting a TV with the [S-VIDEO] terminal

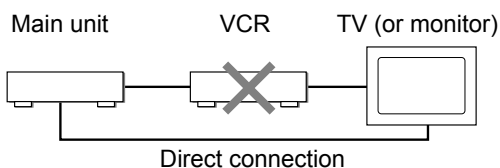


Connecting a TV with the [COMPONENT VIDEO OUT] terminals

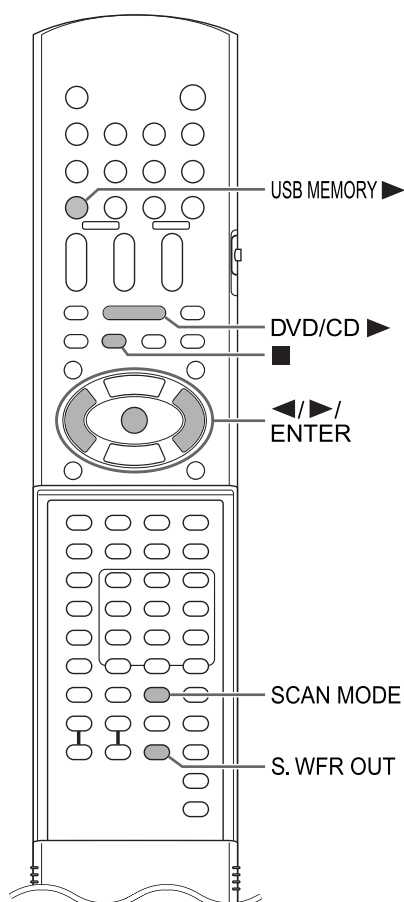


■ IMPORTANT

- Do not connect an S-video cable and a component video cable at the same time. Otherwise the picture may not be played back properly.
- Connect the main unit directly to a TV (or a monitor) without routing through a video cassette recorder (VCR). Otherwise picture distortion may occur during playback. (Routing the connection through a VCR, however, does not affect the audio quality.)



- Connecting the main unit to a VCR-built-in-TV may also cause picture distortion during playback.



Selecting the video signal type

To view an image on the TV screen, select the video signal type correctly according to the TV after connecting the main unit to the TV.

1 Turn on the main unit.

- Refer to “Connecting the power cable” on page 13 and “Turning on the main unit” on page 14.

2 Press [DVD/CD ►].

- When a disc is loaded, press ■ to stop playback.

3 Press [SCAN MODE].

- The current video signal type flashes.



4 Press ◀ or ▶ to select the video signal type suitable for the TV.

- You can select “INTERLACE” or “PROGRESSIVE”. You can obtain better picture quality in “PROGRESSIVE” mode than in “INTERLACE” mode.
- Select “INTERLACE” when connecting to a TV that is only compatible with interlaced video signals.
- Select “PROGRESSIVE” when connecting to a TV that is equipped with a component terminal and is compatible with progressive video signals.

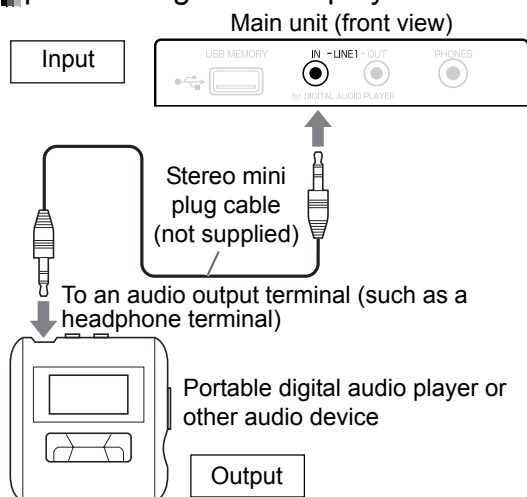
5 Press [ENTER].

NOTE

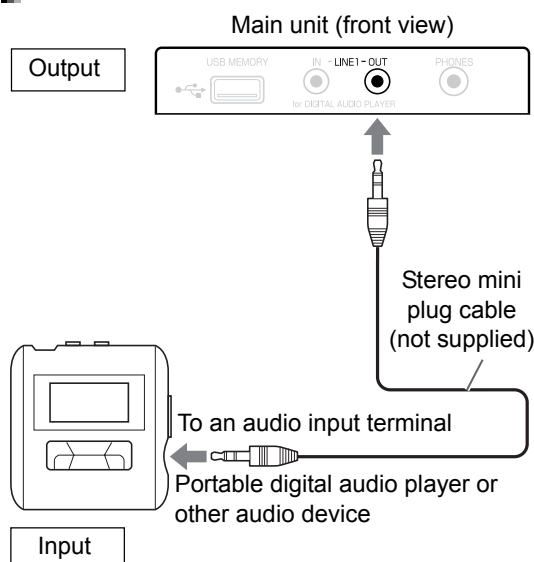
- To check the compatibility of your TV, contact your local JVC customer service center.
- All JVC-manufactured progressive TVs and high-definition TVs are fully compatible with this system.
- Even if the power cable of the main unit is disconnected from the AC outlet or the power is interrupted, the video signal type setting is stored.

Connecting a portable digital audio player

Listening to analog sound from a portable digital audio player



Outputting analog sound to a portable digital audio player



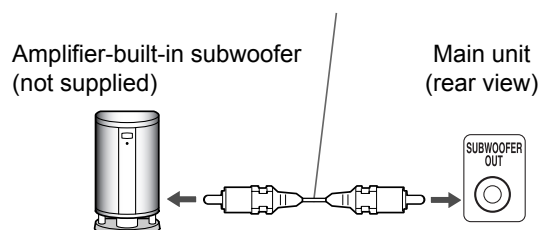
The audio output signal from the [LINE1 OUT] or [LINE 2 OUT] terminal is processed to resemble surround sound when the K2 function, clear voice function, 3D PHONIC function, or headphone surround mode function is activated. To record raw, unprocessed sound, turn off these functions. Do not turn the K2 function on or off while recording sound, as this may cause intermittent sound output.

- An audio signal from a device connected to the [LINE1 IN] terminal is not output via the [LINE1 OUT] terminal.

Connecting a subwoofer

When you connect this system with an amplifier-built-in subwoofer (not supplied), you can enjoy a more dynamic bass sound. Refer to the manual of the subwoofer for details.

Audio cable (not supplied)
(You can use the audio cable supplied with the amplifier-built-in subwoofer.)



Producing sound from the subwoofer

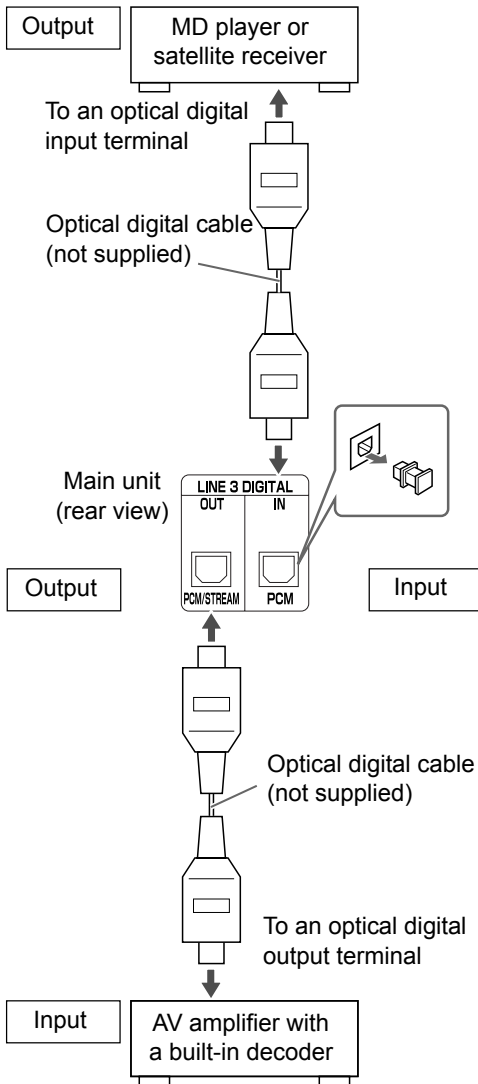
Press [S.WFR OUT] to select “S WOOFER ON” (Subwoofer on) in the display window.

- Each time you press [S.WFR OUT], the display toggles between “S WOOFER ON” and “S WOOFER OFF” (Subwoofer off).

NOTE

- When “S WOOFER ON” is selected, the bass sound from the left and right speakers is automatically turned down, and the bass sound is emitted mainly from the subwoofer.

Connecting other digital audio devices

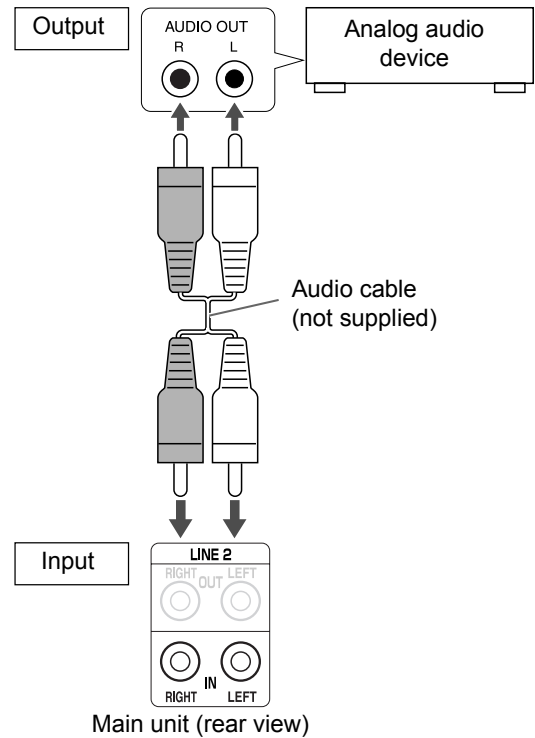


NOTE

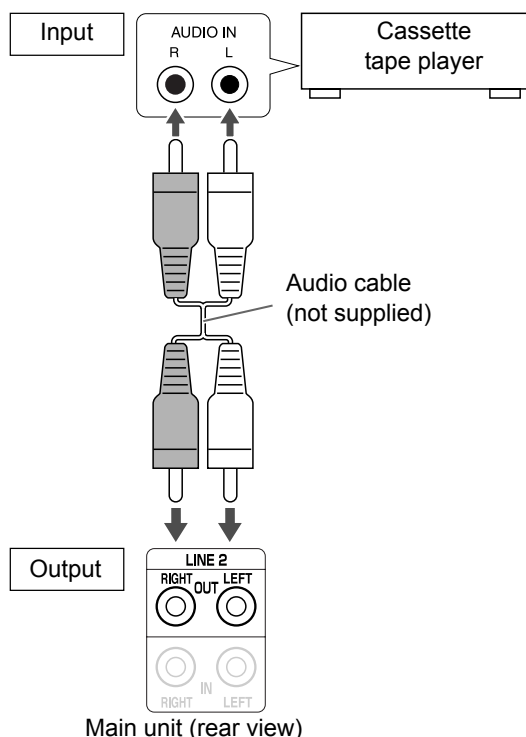
- You can output the audio signal from the [LINE 3 DIGITAL OUT] terminal when a loaded disc or a connected USB mass storage class device is selected as the source.
- Pressing [3D PHONIC] while the audio signal is being output from the [LINE 3 DIGITAL OUT] terminal may cause intermittent sound output.

Connecting other analog audio devices

Listening to sound from an analog audio device



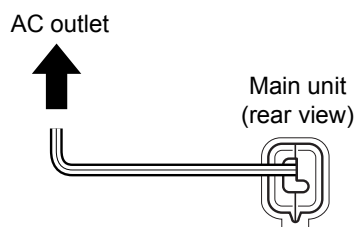
Outputting sound to an analog audio device



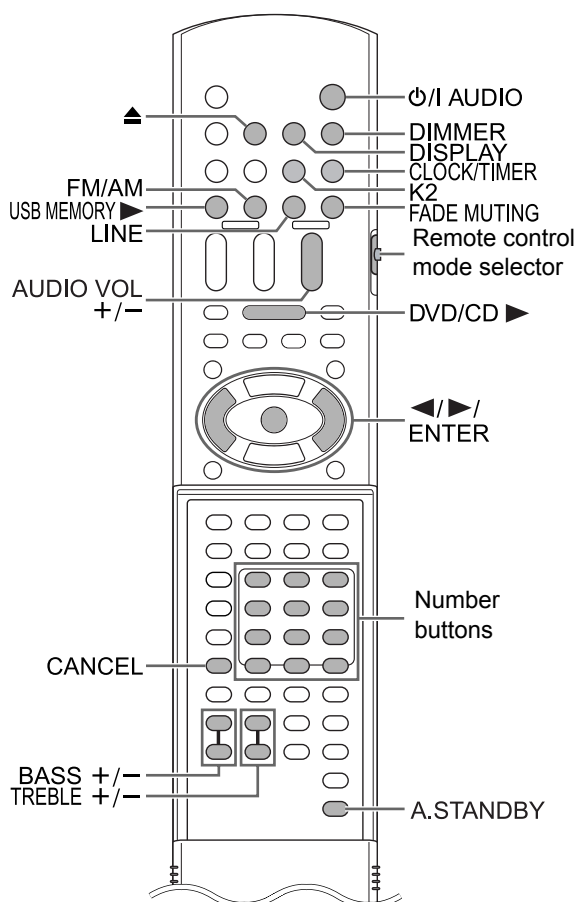
The audio output signal from the [LINE1 OUT] or [LINE 2 OUT] terminal is processed to resemble surround sound when the K2 function, clear voice function, 3D PHONIC function, or headphone surround mode function is activated. To record raw, unprocessed sound, turn off these functions. Do not turn the K2 function on or off while recording sound, as this may cause intermittent sound output.

- An audio signal from a device connected to the [LINE 2 IN] terminals is not output via the [LINE 2 OUT] terminals.

Connecting the power cable



- Connect the power cable after you complete the other connections.
- The [STANDBY] lamp on the main unit lights up.



Using the number buttons

Examples:

5: [5]

15: [≥ 10] → [1] → [5]

150: [≥ 10] → [≥ 10] → [1] → [5] → [0]

Turning on the main unit

Press [POWER/AUDIO] (or POWER on the main unit).

- The power of the main unit turns on and the [STANDBY] lamp on the main unit turns off.
- Press [POWER/AUDIO] again to turn off the power of the main unit.
- With the power off, pressing any of the following buttons also turns on the main unit.
 - [DVD/CD ▶], [USB MEMORY ▶], [FM/AM], [LINE] or ▲ on the remote control
 - [DVD/CD ▶/||], [USB MEMORY ▶/||], [FM/AM/LINE] or ▲ on the main unit

The function assigned to the button starts working at the same time.

■ IMPORTANT

- Slide the remote control mode selector to [AUDIO].

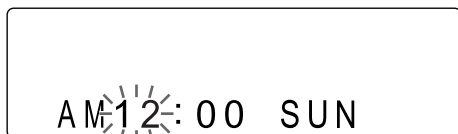


Setting the clock

You can set the clock when the main unit is on or off.

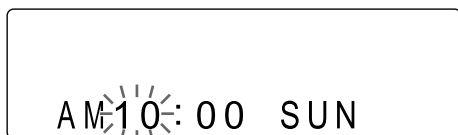
Example: To set the clock to 10:30 a.m. on Wednesday

1 Press [CLOCK/TIMER].



2 Press ◀ or ▶ to select the hour.

- Hold down ◀ or ▶ to incrementally increase the hour setting.
- You can also use the number buttons to specify the hour.



3 Press [ENTER].



4 Press ◀ or ▶ to select the minute.

- Hold down ◀ or ▶ to incrementally increase the minute setting.
- You can also use the number buttons to specify the minute.

5 Press [ENTER].

6 Press ◀ or ▶ to select the day of the week.

- Hold down ◀ or ▶ to change the setting for the day of the week.



- Abbreviations are used for the days of the week.
 SUN→Sunday
 MON→Monday
 TUE→Tuesday
 WED→Wednesday
 THU→Thursday
 FRI→Friday
 SAT→Saturday

7 Press [ENTER].

- The clock starts from 0 seconds in the minute you set.

NOTE

- While setting the clock, you can return to the previous step by pressing [CANCEL].
- The time display on the main unit is a 12-hour clock.
- The clock gains or loses approximately 1 minute per month.
- If the power cable of the main unit is disconnected from the AC outlet or the power is interrupted, the clock setting is stored for approximately 1 minute.

Adjusting the clock

Press [CLOCK/TIMER] repeatedly to display the clock, and then adjust the clock starting from step 2.

Displaying the clock when using this system

Press [DISPLAY].

- Refer to "Changing the display in the display window". (Refer to page 26.)

Adjusting the volume

Press [AUDIO VOL +/-].

- You can also adjust the volume by turning the [VOLUME] control on the main unit.

Turning off the sound temporarily

Press [FADE MUTING].

- Press [FADE MUTING] again or [AUDIO VOL +] to restore the sound. The sound is also restored when the main unit is turned off once and turned on.

Adjusting the bass/treble

Bass: Press [BASS +/-].

Treble: Press [TREBLE +/-].

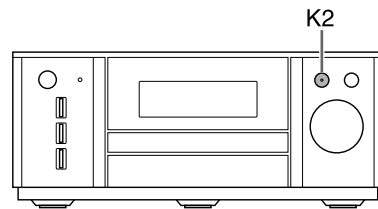
Enhancing the playback sound (K2)

The K2 function is designed to provide natural sound by improving the playback sound from low-bit-rate digital sources.

The function compensates for sound waves dissipated during digital recording compression to approximate the original analog sound. Sound is reproduced with more bits (24 bit) and a wider range of frequency (128 kHz, 176.4 kHz or 192 kHz).

Press [K2] on the remote control or on the main unit.

- When the K2 function is activated, the [K2] lamp (button) on the main unit lights up.
- Each time you press [K2], the display changes as follows.
 - "K2 Mode 1":
Plays back a digital source with non-compressed sound signals (linear PCM).
 - "K2 Mode 2":
Plays back a digital source with compressed sound signals (Dolby digital, DTS, MP3 or WMA).
 - "K2 OFF":
Cancels the K2 function.



NOTE

- The initial setting is "K2 OFF".
- If [K2] is pressed when the clear voice function, headphone surround mode function, or 3D PHONIC is activated, these functions are turned off and the K2 function is activated.
- If [K2] is pressed when an AM/FM broadcast or an analog audio device connected to the [LINE 1 IN] or [LINE 2 IN] terminal is selected as the source, "ANALOG SOURCE" is displayed in the display window, and the K2 function is not activated. The K2 function is activated when a loaded disc, a connected USB mass storage class device, or a digital audio device connected to the [LINE 3 DIGITAL IN] terminal is selected as the source.
- The original range of frequency is automatically detected and extended to a specific range. When the original range is 32 kHz, 44.1 kHz or 48 kHz, the range is extended to 128 kHz, 176.4 kHz or 192 kHz respectively.
- This function is available when "PCM ONLY" is selected for "DIGITAL AUDIO OUTPUT" (refer to page 43). "NO OPERATION" appears in the display window and the K2 function cannot be used when "DOLBY DIGITAL/PCM" or "STREAM/PCM" is selected.

Auto standby function

If no sound is produced for 3 minutes, the main unit automatically turns off.

This function is available when a loaded disc, a connected USB mass storage class device, or a device connected to the [LINE1 IN] terminal is selected as the source.

You cannot use this function when a radio broadcast or a device connected to the [LINE 2 IN] terminals or [LINE 3 DIGITAL IN] terminal is selected as the source.

Activating the auto standby function

- When a loaded disc, a connected USB mass storage class device, or a device connected to the [LINE1 IN] terminal is selected as the source

Press **[A.STANDBY]**.

"A. STBY" indicator

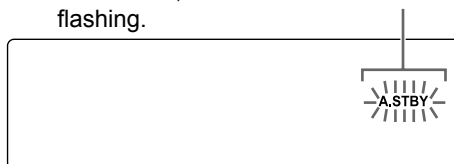


- Pressing [A.STANDBY] once again deactivates the function. (The display window changes to "A STBY CANCEL".)

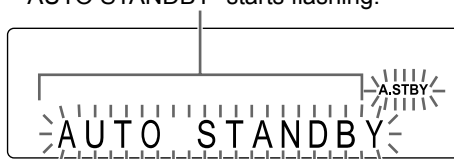
Performance of the auto standby function

When playback of a loaded disc, a connected USB mass storage class device, or a device connected to the [LINE1 IN] terminal finishes, the auto standby function starts a countdown.

At this time, the "A.STBY" indicator starts flashing.



20 seconds before the main unit turns off, "AUTO STANDBY" starts flashing.



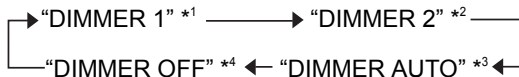
When no operation is carried out for 3 minutes, the main unit automatically turns off.

Changing the brightness of the display window

■ When the main unit is turned on

Press [DIMMER] repeatedly.

- Each time you press [DIMMER], the setting in the display window changes as follows.



*1 The display window becomes darker than the normal display brightness.

*2 The display window becomes darker than "DIMMER 1".

*3 When a video disc/file is played back, the display window becomes darker automatically.

*4 The normal display brightness is restored.

Turning off the display window

You can turn off the display window when the main unit is turned off.

■ When the main unit is turned off

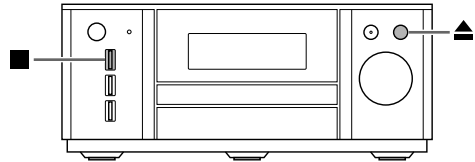
Press [DIMMER] repeatedly.

- Each time you press [DIMMER], the setting toggles between "DISPLAY ON" and "DISPLAY OFF" in the display window.

Locking disc ejection

You can lock the disc tray to prevent the disc from being ejected.

■ **Setting the disc ejection lock**



■ When the main unit is turned off

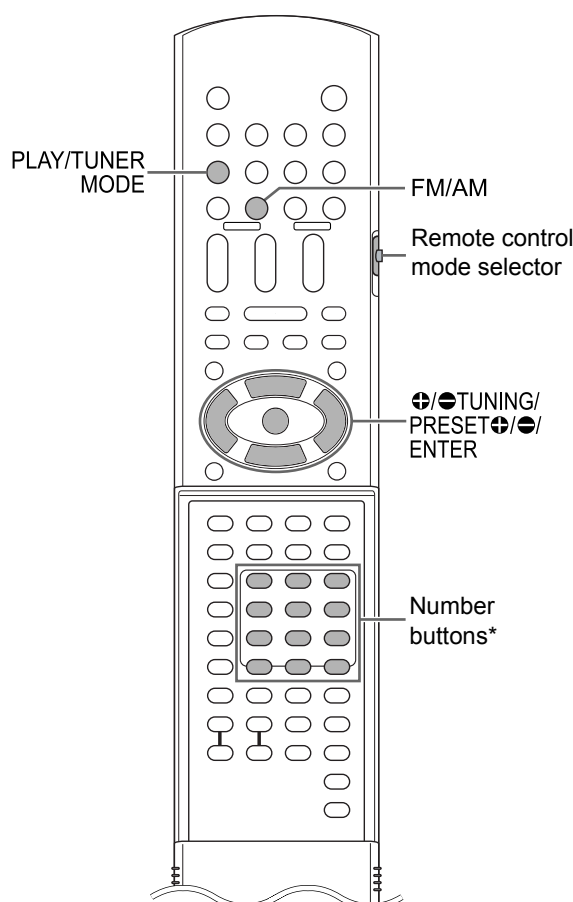
Press ▲ on the main unit while holding down ■ on the main unit.



NOTE

- Repeat this step to cancel the disc ejection lock. ("UNLOCKED" is displayed.)

Listening to radio broadcasts



* For the number button usage, refer to "Using the number buttons" on page 14.

■ IMPORTANT

- Slide the remote control mode selector to [AUDIO].

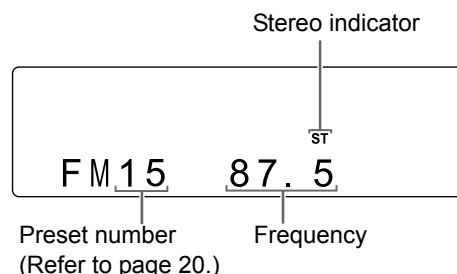


Selecting a radio station

1 Press [FM/AM] to select "FM" or "AM" in the display window.

- Pressing [FM/AM] selects a radio broadcast as the sound source.
- Repeatedly pressing [FM/AM/LINE] on the main unit can also select a radio broadcast as the source.
- Each time you press [FM/AM], the band toggles between "FM" and "AM".

Example: When an FM radio broadcast is received



2 Press [+ TUNING] or [- TUNING] repeatedly to select a radio station (frequency).

- When the main unit has received an FM stereo broadcast, the "ST" (stereo) indicator lights up in the display window.
- You can also select a radio station using automatic tuning.

■ Automatic tuning:

Hold down [+ TUNING] or [- TUNING] until the frequency starts changing, and then release the button.

- When the main unit has received a broadcast, the frequency automatically stops changing.
- You can select a specific radio station while searching for a broadcast. Press [+ TUNING] or [- TUNING] to stop automatic tuning when the desired frequency appears in the display window.

NOTE

- If an FM stereo broadcast is difficult to hear because of noise, you may be able to hear the broadcast more easily by pressing [PLAY/TUNER MODE] to switch the sound to monaural reception. In this case, the “MONO” (monaural) indicator lights up in the display window. To return the sound to stereo reception, press [PLAY/TUNER MODE] again.
- If a beeping sound disturbs your AM broadcast, you can reduce the noise. Pressing [PLAY/TUNER MODE] displays “AM BEAT CUT” in the display window for a short time and reduces the noise.

Tuning in to a preset radio station

Presetting radio stations in the main unit allows you to easily tune in to a radio station.

■ Presetting radio stations

You can store up to 30 FM radio stations and up to 15 AM radio stations.

1 Select a radio station you want to store.

- Refer to “Selecting a radio station” on page 19.

2 Press [ENTER].

- The preset number flashes in the display window for approximately 5 seconds.

3 While the preset number is flashing, press [PRESET +] or [PRESET -] to select the preset number you want to use.

- You can also select the preset number by using the number buttons.

4 Press [ENTER] while the selected number is flashing.

- “STORED” appears and the selected radio station is stored.

NOTE

- When you store a radio station to a preset number to which another radio station has previously been stored, the newly set radio station replaces the previously stored radio station.

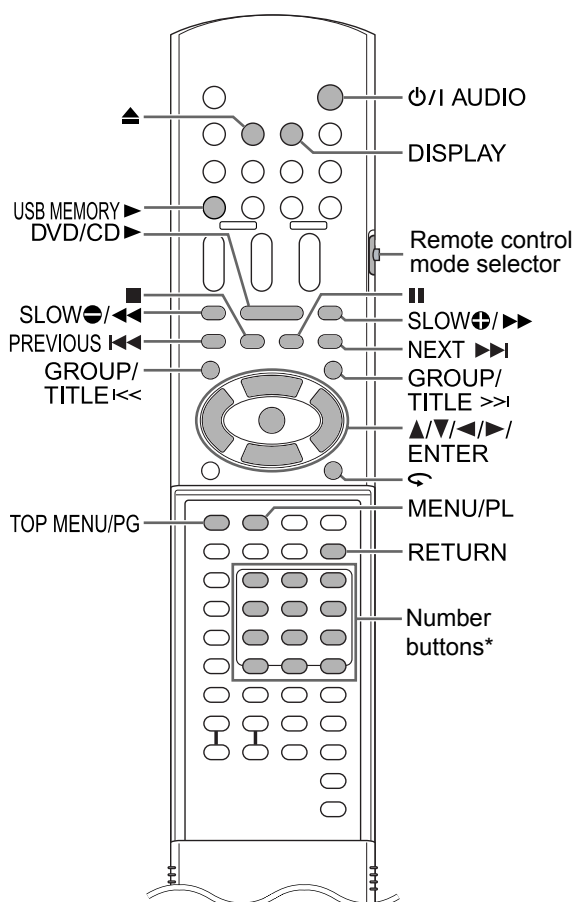
■ Tuning in to a preset radio station

- When an FM or AM radio broadcast is selected as the source

Press the number buttons to select the preset number of the radio station to which you want to tune in.

- You can also select the preset number by pressing [PRESET +] or [PRESET -].

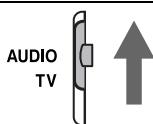
Basic operations of disc/file playback



* For the number button usage, refer to "Using the number buttons" on page 14.

■ IMPORTANT

- Slide the remote control mode selector to [AUDIO].



Playing back a disc

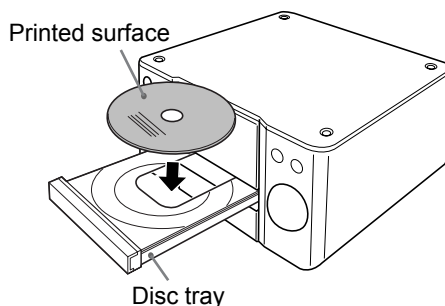


This part explains how to play back the types of discs shown above.

- 1 Press $\blacktriangle$ on the remote control or on the main unit.**

- The disc tray ejects.

- 2 Place a disc on the disc tray.**



- To play back an 8-cm ($3\frac{3}{16}$ ") disc, place it on the inner hollow of the disc tray.

- 3 Press [DVD/CD $\blacktriangleright$] on the remote control or [DVD/CD $\blacktriangleright$ / $\parallel$] on the main unit.**

NOTE

- A menu screen may appear on the TV screen after DVD playback starts. In such a case, operate the menu screen, using $\blacktriangle$, $\blacktriangledown$, $\blacktriangleleft$, $\blacktriangleright$, the number buttons and [ENTER]. (Refer to "Selecting a track from the menu screen" on page 30.)

Playing back a file

MP3 WMA WAV JPEG ASF DivX MPEG1 MPEG2

This part explains how to play back 1) files recorded on the loaded disc, and 2) files recorded on a USB mass storage class device connected to the main unit. The operations are explained with a display of MP3 files as an example.

NOTE

- Also refer to “Notes on files recorded on a connected USB mass storage class device” on page 55.
- When files of different types (audio/still picture/video) are recorded on a loaded disc or connected USB mass storage class device, select the file type before playback. (Refer to “FILE TYPE” on page 42.)

1

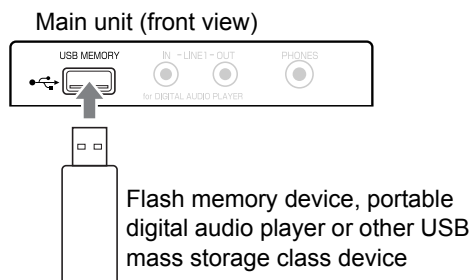
(To play back files on a disc)

Place a disc on the disc tray.

- Refer to steps 1 and 2 on page 21.

(To play back files on a USB mass storage class device)

Connect the USB mass storage class device.



NOTE

- You cannot connect a computer to the [USB MEMORY] terminal of the system.

2

(To play back files on a disc)

Press [DVD/CD ►].

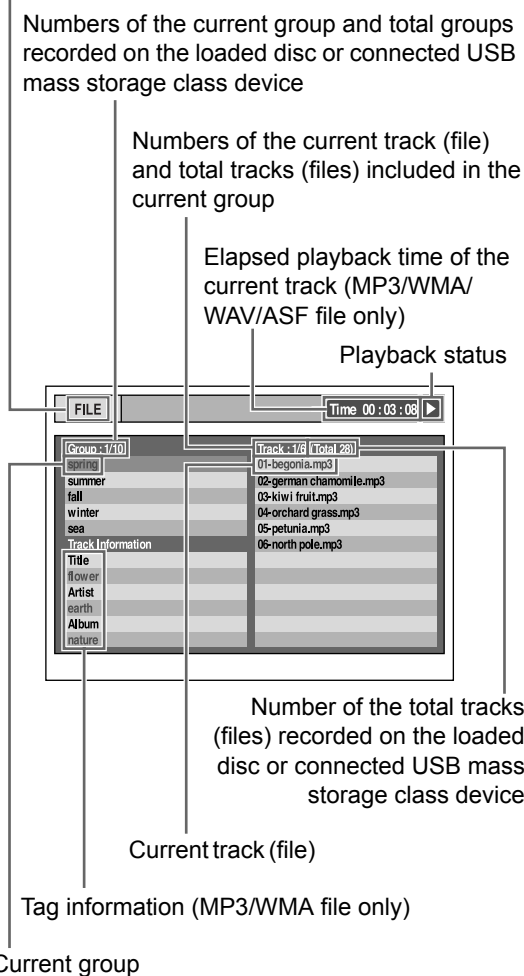
(To play back files on a USB mass storage class device)

Press [USB MEMORY ►].

3 Press ■ to stop playback.

- The menu screen appears on the TV screen.

When a file recorded on the connected USB mass storage class device is selected as the source, “USB” is displayed.



NOTE

- Depending on the file type, the menu screen appears without pressing ■. At this time, you can skip step 3.

(Continued on the next page)

4 Press ▲, ▼, ◀ or ▶ to select a group and track.

NOTE

- You can also use [GROUP/TITLE ◀/▶] to select a group, and the number buttons, [PREVIOUS ◀◀] or [NEXT ▶▶] to select a track.

5 Press [DVD/CD ▶] or [USB MEMORY ▶].

NOTE

- If you have skipped step 3, you do not have to proceed to step 5.

Slide-show playback

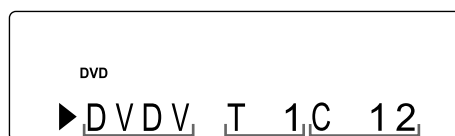
- JPEG files are continuously played back beginning with the selected file.
- Display time for a file in slide-show playback is approximately 3 seconds.
- Press [ENTER] to view only the selected file.

Display window on the main unit for disc/file types



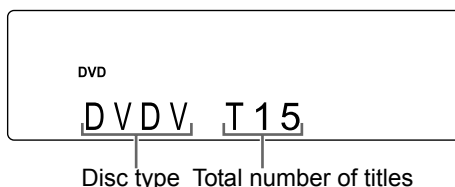
DVD VIDEO/DVD AUDIO/DVD VR

- When a disc is played back



- When a DVD AUDIO is played back, "DVDA" is displayed instead of "DVDV", "G" (Group) is displayed instead of "T" (Title), and "T" (Track) is displayed instead of "C" (Chapter).
- When a DVD VR is played back, "PG" (Original program) or "PL" (Play list) is displayed instead of "T" (Title).
- If the "BONUS" or "B.S.P." indicator is displayed during DVD AUDIO playback, refer to page 38.

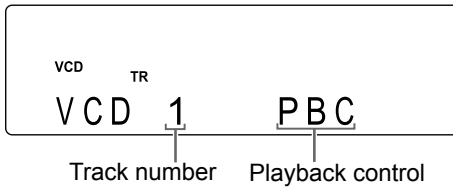
- When a disc is stopped



- When "RESUME" is displayed in the display window, refer to page 27.
- When a DVD AUDIO is stopped, "DVDA" is displayed instead of "DVDV", and the total numbers of groups and the tracks are displayed instead of the total numbers of the titles.
- When a DVD VR is stopped, "VR" is displayed instead of "DVDV".

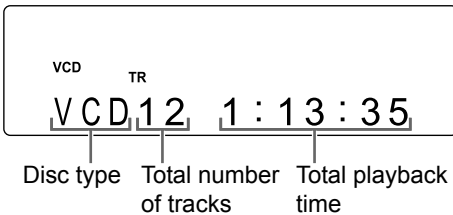
VCD/SVCD

■ When a disc is played back



- You can use the menu screen to control playback of a PBC compatible disc.
- To cancel the PBC function, follow the instructions below.
 - Specify the track number using the number buttons when the disc is stopped.
 - Specify the track number using [PREVIOUS ◀◀] or [NEXT ▶▶] when the disc is stopped, and then press [DVD/CD ▶].
- Press [RETURN] to return to the upper layer during PBC playback.

■ When a disc is stopped



A few seconds later

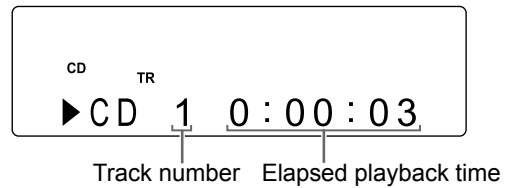
(When the PBC function is activated)



- When "RESUME" is displayed in the display window, refer to page 27.

CD

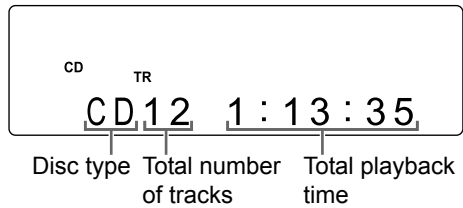
■ When a disc is played back



■ When a disc is paused

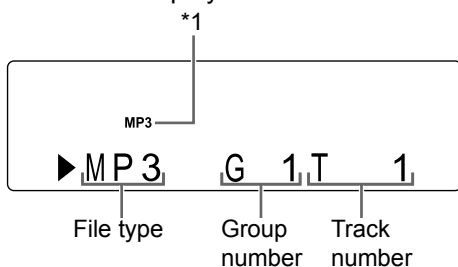


■ When a disc is stopped



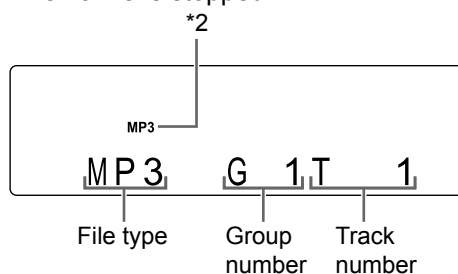
MP3/WMA/WAV/ASF/DivX/MPEG1/MPEG2 file

■ When a file is played back



*1 "MP3" or "WMA" appears when an MP3 or WMA file is played back.

■ When a file is stopped

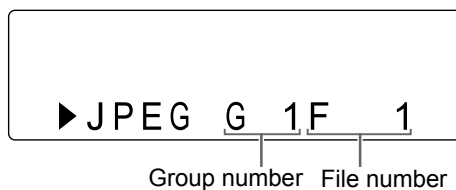


• When "RESUME" is displayed in the display window, refer to page 27.

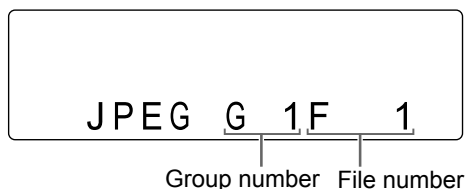
*2 "MP3" or "WMA" appears when an MP3 or WMA file is stopped.

JPEG file

■ When a file is played back



■ When a file is stopped



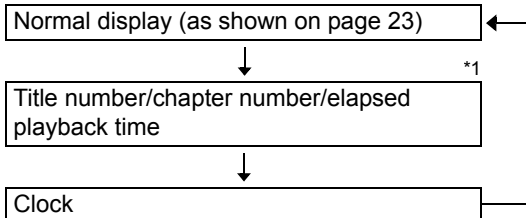
Changing the display in the display window



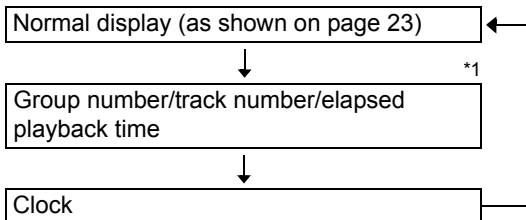
Press [DISPLAY] repeatedly during playback.

- Each time you press [DISPLAY], the display changes.

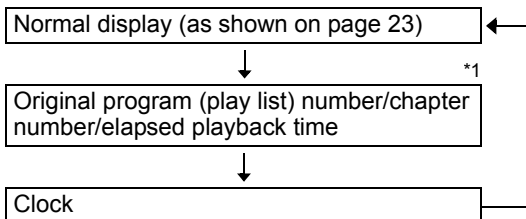
■ DVD VIDEO



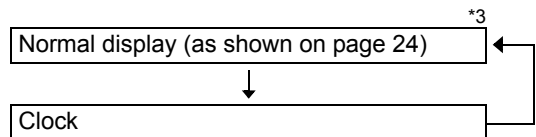
■ DVD AUDIO



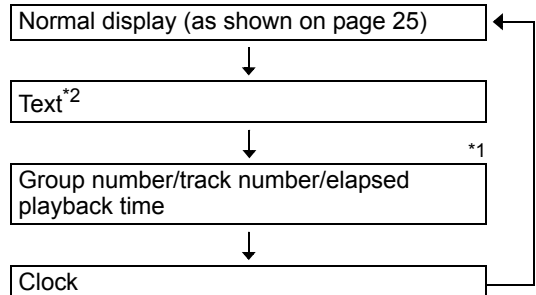
■ DVD VR



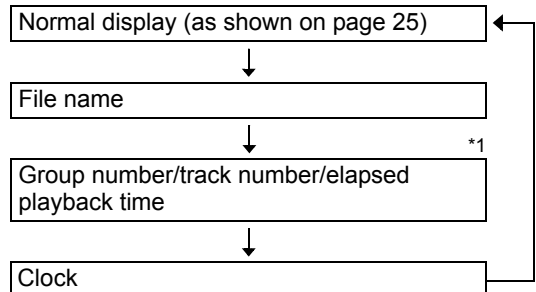
■ VCD/SVCD/CD/JPEG file



■ MP3/WMA file



■ WAV/ASF/DivX/MPEG1/MPEG2 file



*1 This is displayed in the display window when a disc/file is played back.

*2 When text, such as a tag information, has been recorded in the MP3/WMA file, the text appears and scrolls by in the display window.

*3 When the PBC function is canceled (refer to page 24), the elapsed playback time is displayed instead of "PBC" in the display window.

Messages on the TV screen

When a DVD VIDEO or an USB mass storage class device is selected as the source, the messages shown below are displayed on the TV screen to indicate its status.

NOW READING:

Appears when the main unit is reading the disc/file information. Wait for a short time.

REGION CODE ERROR!:

Appears when the region code of the disc does not match the code supported by the main unit. (Refer to page 53.)

NO DISC:

Appears when no disc is loaded.

NO USB DEVICE:

Appears when a USB mass storage class device is not connected.

OPEN:

Appears when the disc tray is opening.

CLOSE:

Appears when the disc tray is closing.

CANNOT PLAY THIS DISC:

Appears when attempting to play back an unplayable disc.

CANNOT PLAY THIS DEVICE:

Appears when there are no playable files on a USB mass storage class device.

Guide icons on the TV screen (on-screen guide)

: Play



: Pause



: Fast reverse/fast forward search



: Slow motion playback (reverse/forward directions)



: Containing multi-view angles (Refer to page 34.)



: Containing multi-audio languages (Refer to page 34.)



: Containing multi-subtitle languages (Refer to page 34.)



: The disc/file cannot accept the operation you have attempted.

Stopping playback

■ When a disc/file is played back

Press ■.

Resuming playback

When playback is stopped in the middle, playback can be started from the stopped position.

Temporarily stopping playback

■ When a disc/file is played back

Follow any of the operations below.

Press ■ once.*1 *2

Press [⏻/AUDIO] to turn off the main unit.

Select a source other than the disc/file.*2

*1 "RESUME" is displayed in the display window. If ■ is pressed twice, the position where playback has been stopped is cleared.

*2 After this operation, the position where playback has been stopped is stored even when the main unit is turned off by pressing [⏻/AUDIO].

Starting playback from the stored position

Press [DVD/CD ►] or [USB MEMORY ►].

NOTE

- This function does not work in program playback or random playback.
- The stored position is cleared if the disc tray is opened or the USB mass storage class device is disconnected.
- You can deactivate the resume playback function. (Refer to "RESUME" on page 43.)
- When a file on the USB mass storage class device is selected as the source, this function may not work as explained above.

Pausing playback



■ When a disc/file is played back

Press II.

- To return to normal playback, press [DVD/CD ►] or [USB MEMORY ►].

Advancing the picture frame by frame



■ When a disc/file is paused

Press II repeatedly.

- You cannot use this function by pressing [DVD/CD ►/II] on the main unit.

Fast reverse/fast forward search



There are two methods.

■ When a disc/file is played back

- **Press ◀◀ or ▶▶.**

Each time you press ▶▶, the speed increases. To restore the normal speed, press [DVD/CD ►] or [USB MEMORY ►].

- **Hold down I◀◀ or ▶▶I.**

NOTE

- For some discs/files, sound is intermittent or no sound is produced during fast reverse/fast forward search.
- The selectable speeds and displays vary by the disc/file type.

Playing back from a position 10 seconds before



■ When a disc is played back

Press ◀.

NOTE

- You cannot go back to the previous title and original program (play list).

Slow motion playback

DVD VIDEO DVD VR VCD SVCD

DVD AUDIO (only for moving images)

■ When a disc is paused

Press [⏮ SLOW] or [SLOW ⏭].

- Each time you press [⏮ SLOW] or [SLOW ⏭], the speed increases.
- Press [⏸] to pause playback, and press [DVD/CD ▶] to return to normal playback.

NOTE

- No sound is produced.
- The picture motion in the reverse direction may not be smooth.
- For a VCD, SVCD or DVD VR, slow motion playback can be used in the forward direction only.

Skipping to the beginning of a chapter/track/file

DVD VIDEO DVD AUDIO DVD VR CD VCD SVCD MP3 WMA WAV

JPEG ASF DivX MPEG1 MPEG2

■ When a disc/file is played back

Press [PREVIOUS ⏮] or [NEXT ⏭] repeatedly.

- Press [GROUP/TITLE ⏮/⏭] to select the title or group.

NOTE

- You cannot skip to the previous track even by pressing [PREVIOUS ⏮] during random playback. (Refer to page 33.)

Selecting a chapter/track using the number buttons

DVD VIDEO DVD AUDIO DVD VR CD MP3 WMA WAV JPEG

ASF DivX MPEG1 MPEG2

VCD SVCD (PBC off)

■ When a disc/file is played back

Use the number buttons to select the chapter number or track number.

Skipping at approximately 5 minute intervals

DivX MPEG1 MPEG2

You can skip within a file at approximately 5 minute intervals. This is useful especially when you want to skip within a long file.

■ When a disc/file is played back

Press [◀] or [▶].

- Each time you press [◀] or [▶], the playback position skips to the beginning of the previous or next interval. Each interval is approximately 5 minutes.

NOTE

- Intervals are automatically assigned from the beginning of a file.
- You can use this function only within the same file.

Selecting a track from the menu screen



■ When a disc is stopped or played back

- 1 Press [MENU/PL] or [TOP MENU/PG].
 - The menu screen is displayed.
- 2 Press ▲, ▼, ◀, ▶ or the number buttons to select the desired track.
- 3 Press [ENTER].

NOTE

- You can use this function only when a menu screen is recorded on the disc.
- For a VCD/SVCD, [MENU/PL] and [TOP MENU/PG] may be unavailable in step 1. In this case, press [RETURN] once or more.
- For a VCD/SVCD, you cannot use ▲, ▼, ◀ and ▶ in step 2.
- For a VCD/SVCD whose menu screen has a couple of pages, you can change the page by pressing [PREVIOUS ◀◀] or [NEXT ▶▶] in step 2.
- Playback may start for some discs without pressing [ENTER] in step 3.



■ When a disc is stopped or played back

- 1 Press [TOP MENU/PG] to display the original program or press [MENU/PL] to display the play list.

Original program

ORIGINAL PROGRAM				
No	Date	Ch	Time	Title
1	12/03/04	L 1	10:15am	La fleur
2	12/09/04	L 1	11:05am	The last struggle
3	12/18/04	L 1	8:17am	free flyer
4	12/20/04	L 1	7:47am	BOOM!
5	12/25/04	L 1	7:38pm	Mr. Lawrence
6	12/28/04	L 1	2:20pm	Satisfy U

Title name
 Starting time for the title recording
 Channel information
 Recording date

Play list

PLAY LIST				
No	Date	Chap	Length	Title
1	12/03/04	2	0:23:24	Nebula G.
2	12/15/04	4	1:04:39	CDJ
3	12/24/04	13	0:41:26	Secret Garden
4	12/27/04	17	0:09:08	S. Walker

Total playback time for the title
 Number of chapters included in the title
 Recording date

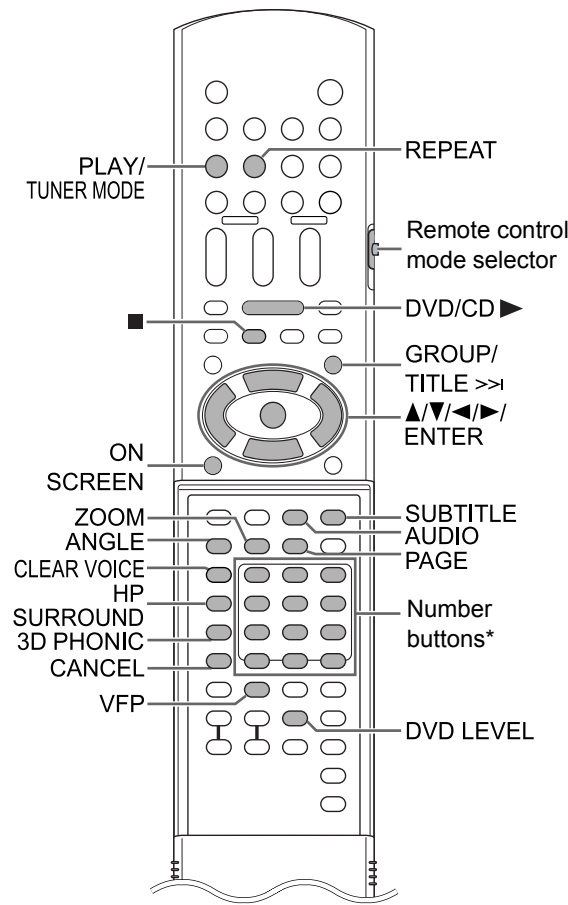
- The play list does not appear when a play list has not been recorded to the disc.

- 2 Press ▲ or ▼ to select the desired title.

- 3 Press [ENTER].

- When you have selected the original program by pressing [TOP MENU/PG] in step 1, playback starts from the selected title to the following titles.
- When you have selected the play list by pressing [MENU/PL] in step 1, only the selected title is played back.

Convenient functions of disc/file playback



* For the number button usage, refer to "Using the number buttons" on page 14.

■ IMPORTANT

- Slide the remote control mode selector to [AUDIO].



Playing back a disc/file in the desired order (Program playback)



(only on a loaded disc)

You can program a maximum of 99 chapters or tracks. The same chapter or track can be programmed more than once.

■ When a disc/file is stopped

1 Press [PLAY/TUNER MODE] to display "PROGRAM" in the display window.

- If you accidentally pressed [PLAY/TUNER MODE] twice or more, press [PLAY/TUNER MODE] repeatedly until "PROGRAM" is displayed.

Example: Display for a DVD VIDEO



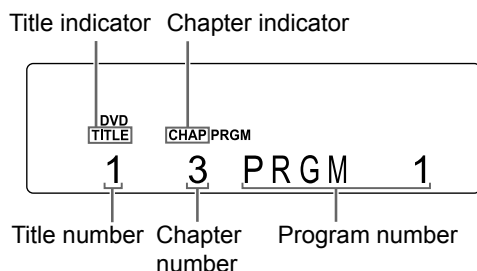
Example: TV screen for a DVD VIDEO (Program screen)

PROGRAM		
No	Group/Title	Track/Chapter
1		
2		
3		
4		
5		
6		
7		
8		

2 Press the number buttons to program chapters/tracks.

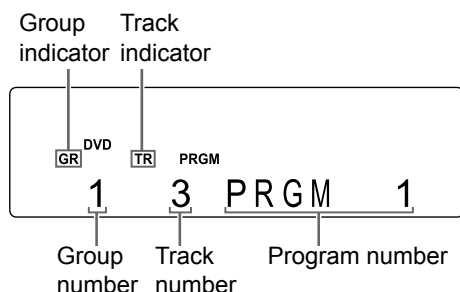
Display for a DVD VIDEO

- Select a title number, and then a chapter number.



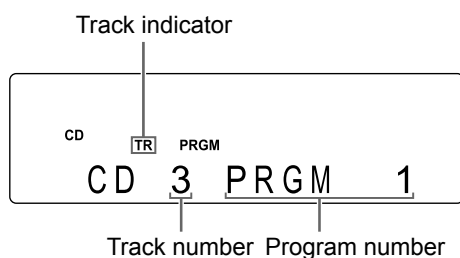
Display for a DVD AUDIO/MP3/WMA/WAV file

- Select a group number, and then a track number.



Display for a VCD/SVCD/CD

- Select a track number.
- As you finish the track selection, the total time for the program playback is displayed.



Example: TV screen for a DVD VIDEO (Program screen)

PROGRAM		
No.	Group/Title	Track/Chapter
1	1	3
2		
3		
4		
5		
6		
7		
8		

- Before selecting a bonus group of a DVD AUDIO, cancel the "BONUS" indicator as explained in "Playing back the bonus group" on page 38.
- You can program up to 99 chapters/tracks.

NOTE

- Instead of using the number buttons, when you press [ENTER] in the "Track/Chapter" column on the TV screen, "ALL" appears and all the chapters/tracks in the selected title/group are programmed.
- You can erase the programmed tracks one by one from the bottom of the list on the program screen by pressing [CANCEL] repeatedly.
- You can erase the whole program by holding down [CANCEL].
- Opening the disc tray also erases the program.

3 Press [DVD/CD ►].

Confirming the program

- When a disc/file is played back

Press ■.

- Playback stops and the program screen appears on the TV screen.

Canceling program playback

- When a disc/file is stopped

Press [PLAY/TUNER MODE] repeatedly to display an item other than "PROGRAM" in the display window.

- This operation does not erase the program.

Playing back a disc/file in a random order (Random playback)

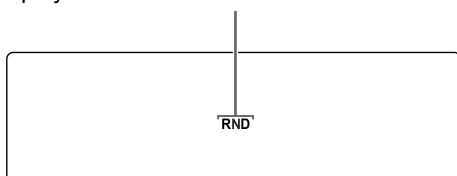


(only on a loaded disc)

■ When a disc/file is stopped

1 Press [PLAY/TUNER MODE] repeatedly to display “RANDOM” in the display window.

This indicator lights up when the random playback function is activated.



2 Press [DVD/CD ►].

NOTE

- Each chapter or track is played back only once.

Canceling random playback

■ When a disc/file is stopped

Press [PLAY/TUNER MODE] repeatedly to display an item other than “RANDOM” in the display window

- Ejecting the disc also cancels random playback.

Playing back a disc/file repeatedly (Repeat playback)



■ When a disc/file is played back

Press [REPEAT].

- Each time you press [REPEAT], the repeat mode changes.

Display on the TV screen	Display in the display window	Indicator in the display window	Usage for the repeat mode
📁 TITLE	REPEAT TITLE	⏮ ALL	Repeats the current title.
📁 ALL or REPEAT ALL	REPEAT ALL	⏮ ALL	Repeats all tracks*1.
📁 GROUP*2 or REPEAT GROUP	REPEAT GROUP*2	GR ⏮	Repeats the current group*3.
📁 CHAP*4	REPEAT CHAP*4	⏮	Repeats the current chapter.
📁 TRACK*4 or REPEAT TRACK	REPEAT TRACK*4	⏮	Repeats the current track.
📁 OFF or no display	REPEAT OFF	—	Cancels repeat.

*1 Repeats the whole program during program playback.

*2 For a DVD VR, “PG” is displayed during original program playback, and “PL” is displayed during play list playback.

*3 Repeats the current original program or the current play list for a DVD VR.

*4 “STEP” is displayed during program/random playback.

NOTE

- You can also use the menu bar to set repeat playback. (Refer to page 39.)
- You can also specify a part to be played back repeatedly by using A-B repeat playback. (Refer to page 40.)
- The repeat mode is automatically canceled if there is a file that cannot be played back.

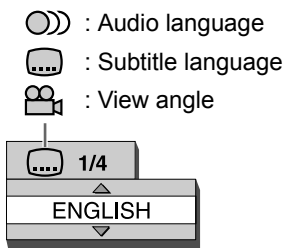
Selecting the audio language, subtitle language and view angle

■ When a disc/file is played back

1 Press the desired button shown below.

Function	Button	Available disc/file
Audio language	[AUDIO]	
Subtitle language	[SUBTITLE]	(only for moving images)
View angle	[ANGLE]	(only for moving images)

Example: TV screen for the subtitle language



2 Press ▲ or ▼ to select the desired language or view angle.

NOTE

- Pressing [SUBTITLE] repeatedly turns the subtitle display on and off.
- The audio language and view angle can also be changed by pressing [AUDIO] or [ANGLE] repeatedly.
- You can only select these function settings when the disc/file contains multiple audio languages, subtitle languages or view angles.
- When a language code such as "AA" and "AB" is displayed, refer to "Language codes" on page 44.
- You can also use the menu bar to set the functions. Refer to page 39.
- "ST", "L" and "R" displayed on the TV screen when playing back a VCD or SVCD, respectively, indicate "Stereo", "Left sound" and "Right sound".

Magnifying the picture



■ When a disc/file is played back or paused

1 Press [ZOOM].

- Each time you press [ZOOM], the picture magnification changes in the display window.

2 Select the area of image you want to magnify by using ▲, ▼, ◀ or ▶.

- To return to normal playback, select "ZOOM OFF" in step 1.

NOTE

- You cannot change the picture magnification during slide-show playback of JPEG files.
- During ASF file playback, ▲, ▼, ◀ or ▶ may not work in step 2.
- When you magnify a picture, image quality may be deteriorated or the image may be distorted.

Adjusting the picture quality (VFP)

DVD VIDEO DVD AUDIO DVD VR VCD SVCD JPEG ASF DivX

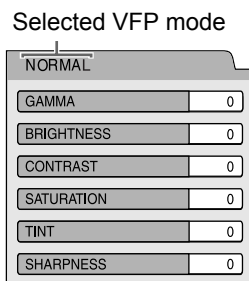
MPEG1
MPEG2

■ When a disc/file is played back or paused

1 Press [VFP].

- The current settings are displayed.

Example: TV screen for the VFP mode



2 Press ◀ or ▶ to select the video fine processor (VFP) mode.

- Each time you press ◀ or ▶, VFP mode changes on the TV screen as follows.
 - “NORMAL”
For normal playback. (You cannot adjust the image quality.) Go to step 7.
 - “CINEMA”
Suitable for viewing a movie in a dim room. (You cannot adjust the image quality.) Go to step 7.
 - “USER1/USER2”
You can adjust the image quality. Go to step 3.

3 Press ▲ or ▼ to select the item you want to adjust.

- Each time you press ▲ or ▼, the item changes on the TV screen as follows.
 - “GAMMA”
Controls the brightness of neutral tints while maintaining the brightness of dark and light portions. (Setting range: -3 to +3)
 - “BRIGHTNESS”
Controls the brightness of the display. (Setting range: -8 to +8)
 - “CONTRAST”
Controls the contrast of the display. (Setting range: -7 to +7)

- “SATURATION”
Controls the saturation of the display. (Setting range: -7 to +7)
- “TINT”
Controls the tint of the display. (Setting range: -7 to +7)
- “SHARPNESS”
Controls the sharpness of the display. (Setting range: -8 to +8)

4 Press [ENTER].

Example: TV screen for “GAMMA”



5 Press ▲ or ▼ to change the value.

6 Press [ENTER].

- To adjust other items, go back to step 3.

7 Press [VFP].

NOTE

- If no operation is made for several seconds during the procedure, the settings made so far are automatically stored.

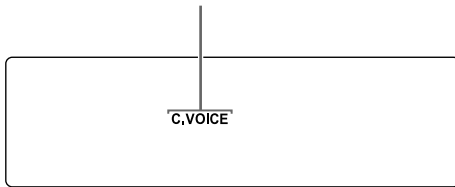
Sharpening the voice sound



This function allows you to easily understand dialog recorded on the disc/file even with the volume down low. This function is useful when you are watching a movie.

Press [CLEAR VOICE].

This indicator lights up when the clear voice function is activated.



- Each time you press [CLEAR VOICE], the clear voice function turns on and off.
- This function is activated when a loaded disc or a connected USB mass storage class device is selected as the source.
- If the clear voice function is activated when the K2 function has already been activated, the K2 function turns off automatically and the clear voice function turns on.

Selecting the headphone surround mode



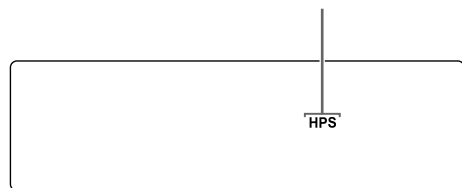
You can listen to surround sound via headphones connected to the [PHONES] terminal.

- This function is activated when a loaded disc or a connected USB mass storage class device is selected as the source.

■ When headphones are connected to the [PHONES] terminal

Press [HP SURROUND].

This indicator lights up when the headphone surround mode function is activated.



- Each time you press [HP SURROUND], the setting toggles between "HP SURR ON" and "HP SURR OFF" in the display window.
- If the headphone surround mode function is activated when the K2 function has already been activated, the K2 function turns off automatically and the headphone surround mode function turns on.

NOTE

- The [PHONES] terminal is for connecting a pair of headphones equipped with a stereo mini plug (not supplied). When headphones are connected, no sound is output from the speakers.
- "HP SURR ON" is displayed in the display window for a short time when headphones are disconnected from the [PHONES] terminal and then connected to the [PHONES] terminal while the headphone surround mode function is on.

Creating realistic sound (3D PHONIC)

DVD VIDEO DVD AUDIO DVD VR VCD SVCD CD MP3 WMA WAV

The two speakers can produce an effect resembling surround sound.

■ When a disc/file is played back

Press [3D PHONIC] repeatedly to select the desired sound effect.

This indicator lights up when 3D PHONIC is activated.



- “ACTION” is suitable for action movies, sport programs or other lively programs.
- Select “DRAMA” to enjoy a sound effect with a relaxing, natural atmosphere.
- Select “THEATER” to enjoy a sound effect as if you were watching the movie in a theater.
- Select “3D PHONIC OFF” to cancel 3D PHONIC (initial setting).

NOTE

- If noise is produced or sound is distorted, select “3D PHONIC OFF”.
- If the 3D PHONIC is activated when the K2 function has already been activated, the K2 function turns off automatically and the 3D PHONIC turns on.

Selecting the audio volume level of the DVD

DVD VIDEO DVD AUDIO

When the audio volume of a DVD VIDEO/DVD AUDIO is lower than that of another source, you can increase the audio volume level of the DVD.

■ When a disc is played back

Press [DVD LEVEL].

- Each time you press [DVD LEVEL], the audio volume level display changes to “NORMAL”, “MIDDLE” or “HIGH” in the display window.
- Select the audio level while listening to the actual sound to confirm the difference.



Functions unique to a DVD AUDIO



Playing back the bonus group

Some DVD AUDIOS may have a special group, called "bonus group". You can use this function when the "BONUS" indicator lights up in the display window.

■ When a disc is played back

1 Press [GROUP/TITLE >>I] repeatedly to select a bonus group.

- "KEY ____" appears on the TV screen, and in the display window.

2 Press the number buttons to enter the pin code (four digits).

- The method of obtaining a pin code differs depending on the disc.

3 Press [ENTER].

- When the correct pin code is entered, the "BONUS" indicator disappears in the display window and the playback of the bonus group starts.
- If an incorrect pin code is entered, try entering the correct pin code again.

Browsable still pictures (B.S.P.)

Some DVD AUDIOS may have pictures called browsable still pictures (B.S.P.). The pictures can be viewed as if you are turning pages. You can use this function when the "B.S.P." indicator lights up in the display window.

■ When a disc is played back

1 Press [PAGE].

- Each time you press [PAGE], the still picture changes.
- You can also switch the picture using ▲ or ▼.

2 Press [ENTER] or wait for a short time.

NOTE

- You can use this function with the menu bar. (Refer to page 39.)

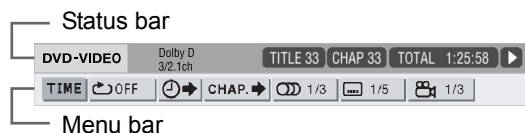
Using the status bar and the menu bar



■ When a disc/file is played back

1 Press [ON SCREEN] twice.

Example: TV screen for a DVD VIDEO



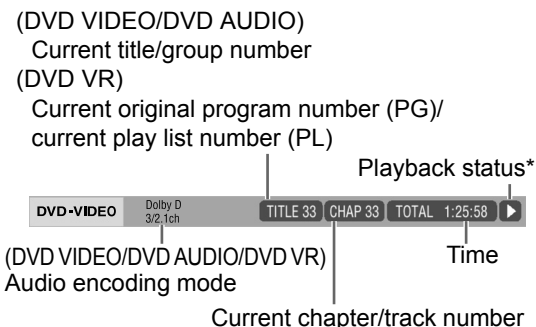
2 Press ◀ or ▶ to select an item you want to operate, and then press [ENTER].

- To turn off the menu bar, press [ON SCREEN].

Information displayed on the status bar

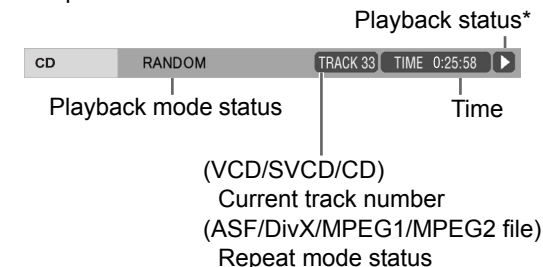
DVD VIDEO/DVD AUDIO/DVD VR

Example: Status bar for a DVD VIDEO



VCD/SVCD/CD/ASF/DivX/MPEG1/MPEG2 file

Example: Status bar for a CD



NOTE

- * The playback status has the same meaning of the guide icons on the TV screen. (Refer to page 27.)

Function list

To select the settings for those items listed below without a description of their operation, press ▲ or ▼ to select an item and press [ENTER].

TIME Time display selection	Changes the time information in the display window and the status bar. Each time [ENTER] is pressed, the display changes on the menu bar. DVD VIDEO/DVD AUDIO (operating during playback) TOTAL : Elapsed playback time of the current title/group. T.REM : Remaining time of the current title/group. TIME : Elapsed playback time of the current chapter/track. REM : Remaining time of the current chapter/track. DVD VR (operating during playback) TOTAL : Elapsed playback time of the current original program/play list. T.REM : Remaining time of the current original program/play list. CD (operating during playback)/VCD/SVCD TIME : Elapsed playback time of the current track. REM : Remaining time of the current track. TOTAL : Elapsed playback time of the disc. T.REM : Remaining time of the disc.
OFF Repeat mode	Refer to page 33. (For A-B repeat playback, refer to page 40.)
Time search	Refer to page 40.
CHAP. Chapter search/track search	DVD VIDEO/DVD VR (chapter search)/DVD AUDIO (track search) Selects a chapter/track. Press the number buttons to enter the chapter/track number and press [ENTER]. Examples: 5 : [5] 24 : [2] → [4]
1/3 Audio language	DVD VIDEO/DVD AUDIO/DVD VR/VCD/SVCD/DivX Refer to page 34.
1/5 Subtitle language	DVD VIDEO/DVD AUDIO/DVD VR/SVCD/DivX Refer to page 34.
1/3 View angle	DVD VIDEO/DVD AUDIO Refer to page 34.
PAGE -/- Page selection	DVD AUDIO Refer to page 38.

Playing back a specified part repeatedly (A-B repeat playback)

DVD VIDEO **DVD AUDIO** **DVD VR** **CD** **VCD SVCD** (PBC off)

You can play back a desired part repeatedly by specifying a start point (A) and an end point (B).

■ When a disc is played back

- 1 Press **[ON SCREEN]** twice.
 - The menu bar appears. (Refer to page 39.)
- 2 Press **◀** or **▶** to select **⏮ OFF**.
- 3 Press **[ENTER]**.
- 4 Press **▲** or **▼** to select "A-B".



- 5 Press **[ENTER]** at the start point of the part to be repeated (specifying point A).
 - The icon on the menu bar is **⏮ A-**.
- 6 Press **[ENTER]** at the end point of the part to be repeated (specifying point B).
 - The icon on the menu bar is **⏮ A-B**.
 - The "C" and "A-B" indicators light up in the display window and the part between points A and B is played back repeatedly.

Canceling A-B repeat playback

There are two methods.

- Press **■**.
- Select **⏮ OFF**. (Select **⏮ A-B** and press **[ENTER]** twice.)

NOTE

- You can use A-B repeat playback only within the same title or track.
- You cannot use A-B repeat playback during program playback, random playback or repeat playback.

Designating the time (Time search)

DVD VIDEO **DVD AUDIO** **DVD VR** **CD** **VCD SVCD** (PBC off)

■ When a disc is played back

- 1 Press **[ON SCREEN]** twice.
 - The menu bar appears. (Refer to page 39.)
 - 2 Press **◀** or **▶** to select **⌚**.
 - 3 Press **[ENTER]**.
- 
- The screenshot shows the DVD menu bar with the following information: DVD-VIDEO, Dolby D 3/2.1ch, TITLE 33, CHAP 33, TOTAL 1:25:58. The 'TIME' tab is selected, and the '⌚' option is highlighted under the '⏮ OFF' button.
- 4 Enter the time using the number buttons.

Example:

When you want to play back a DVD VIDEO from the position of (0 hour) 23 minutes 45 seconds, press the number buttons in the order of [0], [2], [3], [4] and [5].

- You can skip entering the minute and second settings.
 - If the incorrect value is entered, press **◀** to delete the values and enter values again.
- 5 Press **[ENTER]**.
 - To turn off the menu bar, press **[ON SCREEN]**.

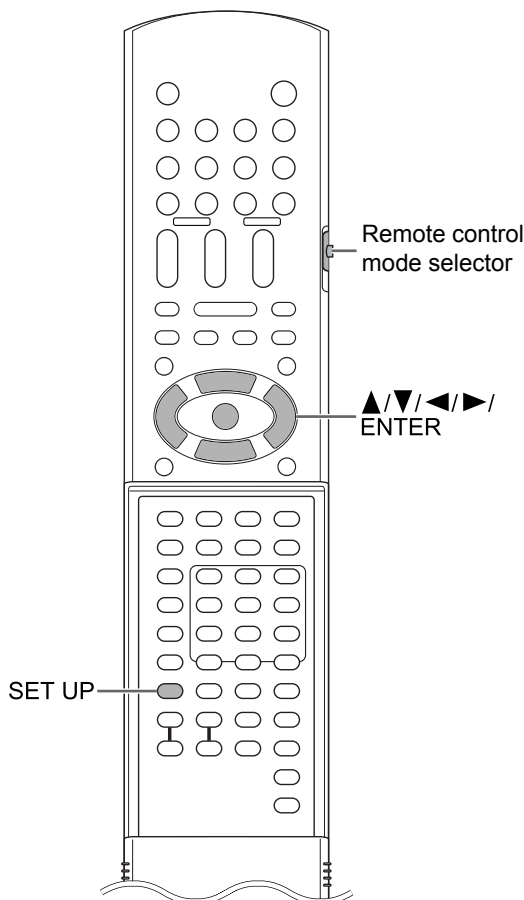
NOTE

- This function does not work during program playback or random playback.
- For a CD, you can use this function any time.
- Time search for a DVD VIDEO is from the beginning of the title.
- Time search for a DVD AUDIO is from the beginning of the track being played back.
- Time search for a VCD, an SVCD and a CD is as follows:
 - When the disc is stopped, time search is from the beginning of the disc.
 - When the disc is played back, time search is within the track currently being played back.

Changing the initial settings with the preference screen



You can use the preference screen to change the initial settings of the main unit according to the environment where the main unit is used.



■ IMPORTANT

- Slide the remote control mode selector to [AUDIO].



NOTE

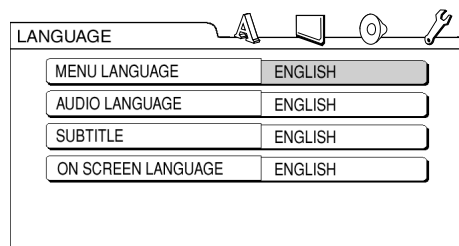
- The top and bottom of the preference screen may not be displayed on a widescreen TV. Adjust the picture size on the TV.

Basic operations

- When a disc/file is stopped or no disc is loaded ("NO DISC" is displayed in the display window)

1 Press [SET UP].

- The preference screen appears on the TV screen.



2 Use ▲, ▼, ◀, ▶ and [ENTER] to operate the preference screen.

- Follow the description on the TV screen to operate the preference screen.

A LANGUAGE

Items	Contents
MENU LANGUAGE	Select the language for the DVD VIDEO menu screen.
AUDIO LANGUAGE	Select the audio language for the DVD VIDEO.
SUBTITLE	Select the subtitle language for the DVD VIDEO.
ON SCREEN LANGUAGE	Select the language displayed on the preference screen.

NOTE

- If the selected language is not recorded on the disc/file, the optimum language set for the disc/file is displayed.
- For a language code such as "AA", refer to the "Language codes" on page 44.

PICTURE

Items	Contents ( : initial setting)
MONITOR TYPE	Select the display method suitable for your TV. 4 : 3 PS (Pan Scan) : For a TV with conventional 4:3 aspect ratio. When a wide screen picture is input, the left and right edges of the picture are not shown on the screen. (If the disc/file is not compatible with Pan Scan, the picture is displayed at the Letterbox ratio.)  4 : 3 LB (Letterbox) : For a TV with conventional 4:3 aspect ratio. When a wide screen picture is input, black bars appear on the top and bottom of the screen.  16 : 9 NORMAL : For a widescreen TV whose aspect ratio is fixed at 16:9. When a conventional screen picture whose aspect ratio is 4:3 is input, black bars appear on the left and right sides of the screen. 16 : 9 AUTO : For a widescreen TV which automatically detects the aspect ratio of the input screen picture. When a conventional screen picture is input  When a widescreen picture is input 

Items	Contents ( : initial setting)
PICTURE SOURCE	Select the item suitable to the video source. AUTO : The video source type (a video or film) is automatically selected. FILM : To view a film or video recorded with the progressive scan method. VIDEO : Suitable for playing back a video.
SCREEN SAVER	You can turn ON or OFF the screen saver. The screen saver activates when there is no operation made for approximately 5 minutes since a still picture was last displayed.
FILE TYPE	When files of different types are recorded on a loaded disc or connected USB mass storage class device, select the file type before playback. AUDIO : For MP3/WMA/WAV files. STILL PICTURE : For JPEG files. VIDEO : For ASF/DivX/MPEG1/MPEG2 files.



AUDIO

Items	Contents (: initial setting)
DIGITAL AUDIO OUTPUT	Select the output signal type suitable to the device connected to the [LINE 3 DIGITAL OUT] terminal. Refer to "List of relationships of DIGITAL AUDIO OUTPUT preference items and output signals" on page 44. PCM ONLY : Device corresponding only to linear PCM. DOLBY DIGITAL/PCM : Dolby Digital decoder or device having the same function. STREAM/PCM : DTS/Dolby Digital decoder or device having the same function.
DOWN MIX	Select the signal suitable to the device connected to the [LINE 3 DIGITAL OUT] terminal. Set "DOWN MIX" only when "DIGITAL AUDIO OUTPUT" is set to "PCM ONLY". DOLBY SURROUND : Dolby Pro Logic decoder-built-in device. STEREO : Ordinary audio device.
D (Dynamic). RANGE COMPRESSION	To correct the difference between high volume and low volume when playing back with low volume (only for a DVD recorded with Dolby Digital). AUTO : The D. RANGE COMPRESSION function automatically turns on. ON : The D. RANGE COMPRESSION function is always on.



OTHERS

Items	Contents (: initial setting)
RESUME	Select ON or OFF . (Refer to page 27.)
ON SCREEN GUIDE	Select ON or OFF . (Refer to page 27.)
AV COMPULINK MODE	When you want to control the main unit and the connected TV or other devices at the same time, select a setting according to the type of terminal on the device connected to the main unit. (Refer to "Using the AV COMPU LINK function" on page 50.) DVD1 : When connecting to the video 3 or DVD input terminal on the TV. DVD2 : When connecting to the video 1 input terminal on the TV. DVD3 : When connecting to the video 2 input terminal on the TV.
DivX REGISTRATION	The main unit has its own registration code. You can confirm the registration code, when necessary. Once you have played back a disc/file on which the registration code is recorded, the registration code of the main unit is overwritten for copyright protection.

List of relationships of DIGITAL AUDIO OUTPUT preference items and output signals

Playback disc/file	DIGITAL AUDIO OUTPUT preference		
	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
48 kHz, 16/20/24 bits linear PCM DVD VIDEO 96 kHz linear PCM DVD VIDEO	48 kHz, 16 bits stereo linear PCM		
48/96/192 kHz, 16/20/24 bits linear PCM DVD AUDIO	48 kHz, 16 bits stereo linear PCM		
44.1/88.2/176.4 kHz, 16/20/24 bits linear PCM DVD AUDIO	44.1 kHz, 16 bits stereo linear PCM		
DTS DVD VIDEO/DVD AUDIO	DTS bit stream	48 kHz, 16 bits stereo linear PCM	
DOLBY DIGITAL DVD VIDEO/ DVD AUDIO	DOLBY DIGITAL bit stream		48 kHz, 16 bits stereo linear PCM
CD/VCD/SVCD	44.1 kHz, 16 bits stereo linear PCM 48 kHz, 16 bits linear PCM		
DTS CD	DTS bit stream	44.1 kHz, 16 bits linear PCM	
MP3/WMA/WAV/DivX/MPEG1/ MPEG2 file	32/44.1/48 kHz, 16 bits linear PCM		

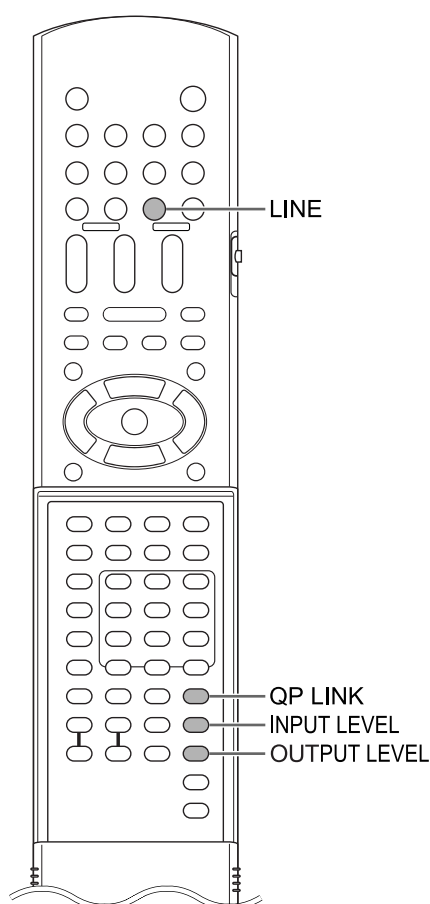
NOTE

- Among DVD VIDEOS without copyright protection, there may be some DVD VIDEOS that output a 20- or 24- bit signal through the [LINE 3 DIGITAL OUT] terminal.

Language codes

Code	Language	Code	Language	Code	Language	Code	Language
AA	Afar	GD	Scots Gaelic	MI	Maori	SL	Slovenian
AB	Abkhazian	GL	Galician	MK	Macedonian	SM	Samoan
AF	Afrikaans	GN	Guarani	ML	Malayalam	SN	Shona
AM	Ameharic	GU	Gujarati	MN	Mongolian	SO	Somali
AR	Arabic	HA	Hausa	MO	Moldavian	SQ	Albanian
AS	Assamese	HI	Hindi	MR	Marathi	SR	Serbian
AY	Aymara	HR	Croatian	MS	Malay (MAY)	SS	Siswati
AZ	Azerbaijani	HU	Hungarian	MT	Maltese	ST	Sesotho
BA	Bashkir	HY	Armenian	MY	Burmese	SU	Sundanese
BE	Byelorussian	IA	Interlingua	NA	Nauru	SV	Swedish
BG	Bulgarian	IE	Interlingue	NE	Nepali	SW	Swahili
BH	Bihari	IK	Inupiak	NL	Dutch	TA	Tamil
BI	Bislama	IN	Indonesian	NO	Norwegian	TE	Telugu
BN	Bengali, Bangla	IS	Icelandic	OC	Occitan	TG	Tajik
BO	Tibetan	IW	Hebrew	OM	(Afan) Oromo	TH	Thai
BR	Breton	JI	Yiddish	OR	Oriya	TI	Tigrinya
CA	Catalan	JW	Javanese	PA	Panjabi	TK	Turkmen
CO	Corsican	KA	Georgian	PL	Polish	TL	Tagalog
CS	Czech	KK	Kazakh	PS	Pashto, Pushto	TN	Setswana
CY	Welsh	KL	Greenlandic	PT	Portuguese	TO	Tonga
DA	Danish	KM	Cambodian	QU	Quechua	TR	Turkish
DZ	Bhutani	KN	Kannada	RM	Rhaeto-Romance	TS	Tsonga
EL	Greek	KO	Korean (KOR)	RN	Kirundi	TT	Tatar
EO	Esperanto	KS	Kashmiri	RO	Rumanian	TW	Twi
ET	Estonian	KU	Kurdish	RU	Russian	UK	Ukrainian
EU	Basque	KY	Kirghiz	RW	Kinyarwanda	UR	Urdu
FA	Persian	LA	Latin	SA	Sanskrit	UZ	Uzbek
FI	Finnish	LN	Lingala	SD	Sindhi	VI	Vietnamese
FJ	Fiji	LO	Laothian	SG	Sangho	VO	Volapuk
FO	Faroese	LT	Lithuanian	SH	Serbo-Croatian	WO	Wolof
FY	Frisian	LV	Latvian, Lettish	SI	Singhalese	XH	Xhosa
GA	Irish	MG	Malagasy	SK	Slovak	YO	Yoruba
						ZU	Zulu

Playing back sources from other devices



Playing back sources from other devices

1 Press [LINE].

- Each time you press [LINE], the display changes in the display window as follows.
 - "LINE1" for selecting the device connected to the [LINE1 IN] terminal
 - "LINE2" for selecting the device connected to the [LINE 2 IN] terminals
 - "LINE3 DIGITAL" for selecting the digital audio device connected to the [LINE 3 DIGITAL IN] terminal

2 Start playback on the connected device.

3 Adjust the volume or the sound quality for your preference.

- Refer to page 16.

NOTE

- Refer also to the operation manual for the connected device.
- An audio signal from a device connected to the [LINE1 IN] terminal is not output via the [LINE1 OUT] terminal.
- An audio signal from a device connected to the [LINE 2 IN] terminals is not output via the [LINE 2 OUT] terminals.
- An audio signal from a device connected to the [LINE 3 DIGITAL IN] terminal is not output via the [LINE 3 DIGITAL OUT] terminal.
- When no device is connected to the [LINE 3 DIGITAL IN] terminal or the power of the connected device is off, after "LINE 3 DIGITAL" is selected, the display changes to "LINE 3 UNLOCK".

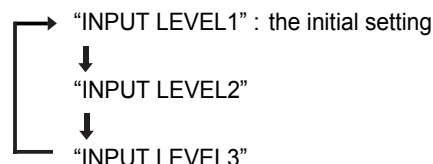
Selecting the signal gain

You can select the gain of the signal from the [LINE1 IN] terminal. Use the initial settings for normal operation. If the sound is too small or too loud, change the settings.

1 Press [LINE] repeatedly to select "LINE1" in the display window.

2 Press [INPUT LEVEL].

- Each time you press [INPUT LEVEL], the display changes as follows.



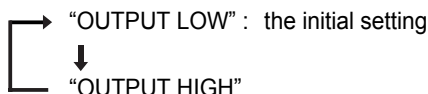
- The signal gain decreases in the order of "INPUT LEVEL1", "INPUT LEVEL2" and "INPUT LEVEL3".

Selecting the output level

When outputting the audio signal from the [LINE1 OUT] terminal to another audio device, you can select the audio level.

Press [OUTPUT LEVEL].

- Each time you press [OUTPUT LEVEL], the display changes as follows.



NOTE

- You cannot use this function when a device connected to the [LINE1 IN] terminal is selected as the source.

QP LINK

When you start analog playback of a portable digital audio player connected to the [LINE1 IN] terminal while the main unit is off or another source is selected, the main unit automatically turns on and the source changes to the connected portable digital audio player. This function is called the quick portable link function (QP LINK).

Activating QP LINK

Press [QP LINK] repeatedly to select “QP LINK ON” in the display window.

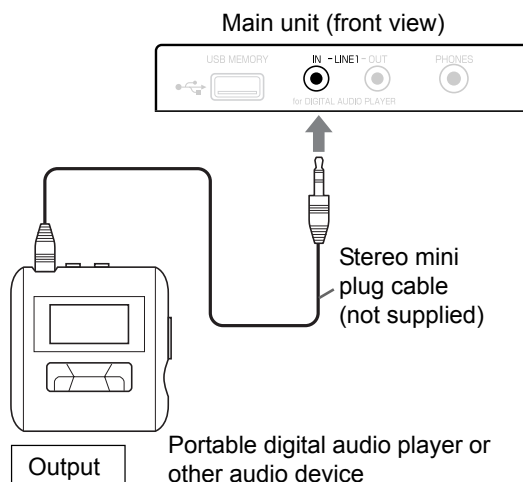
- To deactivate QP LINK, select “QP LINK OFF”.



Using QP LINK

- When “QP LINK ON” is selected

1 Connect a portable digital audio player to the [LINE1 IN] terminal using an audio cable.

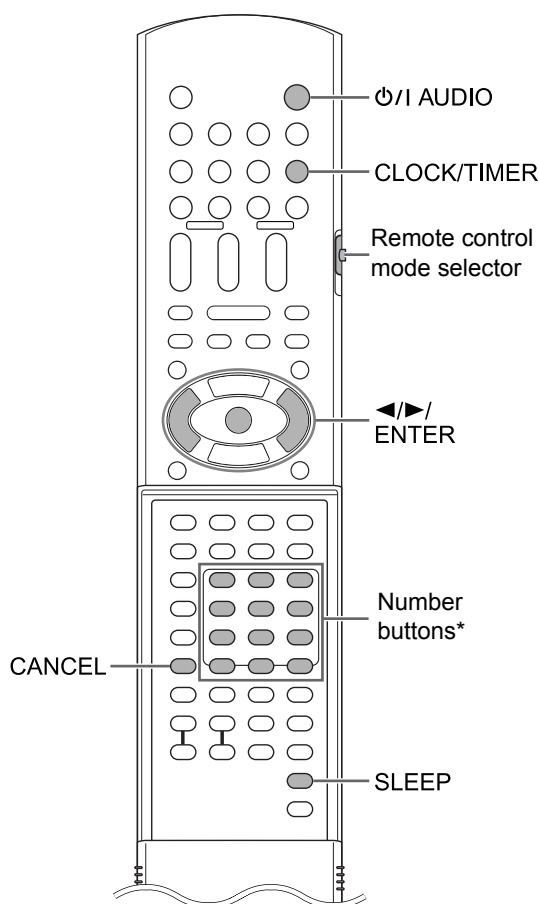


2 Start playback on the portable digital audio player.

- If the main unit is off, the main unit automatically turns on.
- The source from the portable digital audio player is automatically selected, “LINE1” is displayed and sound is produced.
- The QP LINK function is not activated when “DISPLAY OFF” is selected. (Refer to page 18.)

NOTE

- QP LINK works when the “QPL” indicator is displayed.
- Even when “QP LINK ON” is selected, the “QPL” indicator may not light up. For example, when you finish step 2, stop playback and then select another device as the source, the “QPL” indicator turns off for 30 seconds. At this time, however, you can use QP LINK by disconnecting the stereo mini plug cable and connecting it again.



* For the number button usage, refer to “Using the number buttons” on page 14.

■ IMPORTANT

- Slide the remote control mode selector to [AUDIO].



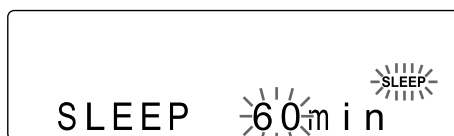
Using the sleep timer

When the time you specify elapses, the main unit is turned off automatically.

Press [SLEEP].

- Each time you press [SLEEP], the time indicated in the display window changes (in minutes).

Example: When the sleep timer is set to 60 minutes



The sleep timer is automatically set in a few seconds, and the display disappears. The “SLEEP” indicator remains on.

NOTE

- When the sleep timer is set, the display window darkens automatically.
- The main unit can charge a USB mass storage class device when the USB mass storage class device is selected as the source. By combining this charging function with the sleep timer, you can charge the device while you are away.

Changing the time

Select the time again by pressing [SLEEP] repeatedly.

Confirming the time

Press [SLEEP] once while the sleep timer is set.

Canceling the sleep timer

Press [SLEEP] repeatedly until “SLEEP OFF” appears.

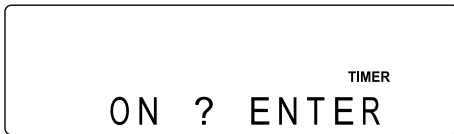
NOTE

- The sleep timer is also canceled when the power is turned off.

Using the playback timer

Set the clock beforehand. (Refer to page 15.)

1 Press [CLOCK/TIMER].



- If you accidentally pressed [CLOCK/TIMER] twice or more, press [CLOCK/TIMER] repeatedly until the display shown above is displayed.

2 Press [CLOCK/TIMER].

3 Set the starting time and ending time with ◀ or ▶, and then press [ENTER].

Example:

When setting the starting time to 8:45



When setting the ending time to 9:45



- Press ◀ or ▶ to select the value and press [ENTER] to set the value.
- You can use the number buttons instead of ◀ or ▶.

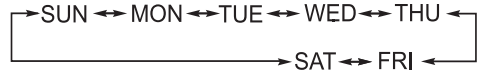
4 Press ◀ or ▶ to select "ONCE" or "WEEKLY", and then press [ENTER].

- ONCE The playback timer works once.
- WEEKLY The playback timer works weekly or every day.

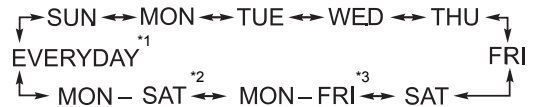
5 Press ◀ or ▶ to select the desired day of the week, and then press [ENTER].

- Each time you press ◀ or ▶, the display changes as follows.

When "ONCE" is selected



When "WEEKLY" is selected



*1 The playback timer works every day.

*2 The playback timer works Monday to Saturday.

*3 The playback timer works Monday to Friday.

6 Press ◀ or ▶ to select the desired source, and then press [ENTER].

- If you have selected "FM" or "AM" in this step, press ◀, ▶ or the number buttons to select the preset number of the radio station whose broadcast you want to listen to, and then press [ENTER].

7 Press ◀ or ▶ to adjust the playback volume, and then press [ENTER].

- You can use the number buttons to specify the volume.
- The settings appear in the display window on the main unit.

(Continued on the next page)

8 Press [⏻/AUDIO] to turn off the main unit.

The indicator lights up when the playback timer is activated.



- The playback timer is available only when the main unit is off.

NOTE

- Turn off the main unit by at least 1 minute prior to the starting time you have selected in step 3.
- While setting the playback timer, you can return to the previous step by pressing [CANCEL] or you can stop the setting by pressing [CLOCK/TIMER].
- When the playback starts, the volume gradually increases to the selected level.
- You can make a variety of playback settings by combining the playback timer and the settings for program playback, random playback or repeat playback. (Refer to pages 31-33.)
- When “LINE1” is selected as the source and “QP LINK ON” is selected, the playback timer activates even if the main unit is turned on. (Refer to page 46.)

Canceling the playback timer

- 1 Press [CLOCK/TIMER].
- 2 Press [CANCEL].



NOTE

- Even after you cancel the playback timer, the setting remains stored.

Activating the playback timer again

- 1 Press [CLOCK/TIMER].
- 2 Press [ENTER].
 - The current playback timer setting appears in the display window.
- 3 Press [⏻/AUDIO] to turn off the main unit.

NOTE

- When the power cable of the main unit is disconnected from the AC outlet or the power is interrupted, the clock and the playback timer settings may be lost. If the settings are lost, set the clock and playback timer again.

Confirming the playback timer settings

- 1 Press [CLOCK/TIMER].
- 2 Press [ENTER].
 - Each of the playback timer settings are displayed in turn every 2 seconds.

Changing the playback timer settings

Set the playback timer again from the start.

- Refer to steps 1 - 8 on pages 48 and 49.

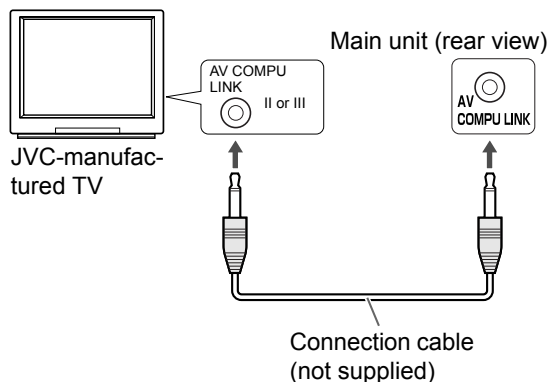
Using the AV COMPU LINK function

When a JVC-manufactured TV with AV COMPU LINK II or III terminals is connected to the main unit using these terminals, operating either the TV or the main unit controls the other device at the same time.

Preparation for the AV COMPU LINK function

NOTE

- Some JVC-manufactured TVs have terminals labeled "AV COMPU LINK". These terminals are the same as the [AV COMPU LINK] terminal on the main unit of this system or, the "AV COMPU LINK II/III" or "AV COMPU LINK" terminal on other JVC-manufactured systems.
- Refer to "OTHERS" on page 43 for determining the "AV COMPULINK MODE" setting.
- Also refer to the manual of the TV to be connected to the main unit.



Input terminal on the TV	"AV COMPULINK MODE" setting
Video 1	DVD2
Video 2	DVD3
Video 3	DVD1

- The AV COMPU LINK function may not work for some TVs when the main unit is connected to the TV via the video 2 or video 3 terminal on the TV.

Operating the AV COMPU LINK function

- 1 Turn on the main power of the TV.
- 2 Play back a disc/file.

- Refer to pages 21–23.
- The power of the TV is turned on.
- The input mode on the TV changes to either the video 1, video 2 or video 3 (DVD) input.

Notes on operation

Suitable locations for the main unit

To minimize the need for servicing and maintain the high quality of this system, do not place the main unit in the following locations:

- In a position subject to high humidity or considerable dust
- On an uneven or unstable surface
- Near a heat source
- Near a computer, fluorescent light or other electric appliance
- In a small room with insufficient ventilation
- In a position exposed to direct sunlight
- In a position exposed to excessive cold
- In a position exposed to strong vibration
- Near a TV, other amplifier, or tuner
- Near a magnetic source

CAUTION

- The operating temperature of this system is 5°C to 35°C (41°F to 95°F). Use in temperatures outside this range may cause a malfunction or damage the system.

Condensation

Under the following conditions, you may not be able to operate this system properly due to condensation formed on the lens of the main unit:

- When you have just started an air conditioner to warm your room
- When you have placed the main unit at an area with high humidity
- When you have moved the main unit from a cold place to a warm place

When condensation forms, leave the main unit turned on, wait for approximately 1 or 2 hours, and then operate the main unit.

Cleaning the main unit

When the operation panel becomes dirty, dust it with a soft dry cloth. When the operation panel is very dirty, wipe it with a cloth dampened with a small amount of a neutral detergent, and then wipe it with a soft dry cloth.

CAUTION

- Do not wipe the operation panel with thinners, benzenes or other chemical agents. Do not spray insecticides onto the operation panel. These may discolor and damage the surface.

License and trademark

- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
- "DTS" is a registered trademark of DTS, Inc. and "DTS 2.0 + Digital Out" is a trademark of DTS, Inc.
- This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.
- DVD logo is a registered trademark of DVD Format/Logo Licensing Corporation.
- DivX, DivX Ultra Certified, and associated logos are trademarks of DivX, Inc. and are used under license.
- Official DivX® Ultra Certified product
- Plays all versions of DivX® video (including DivX® 6) with enhanced playback of DivX® media files and the DivX® Media Format
- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Notes on handling

Important cautions

Installation of the system

- Select a place that is level, dry and neither too hot nor too cold, and between 5°C and 35°C (between 41°F and 95°F).
- Leave sufficient distance between the system and the TV.
- Do not use the system in a place subject to vibration.

Power cable

- Do not handle the power cable with wet hands!
- A small amount of power is always consumed while the power cable is connected to the wall outlet.
- When unplugging the power cable from the wall outlet, always pull on the plug, not the power cable.

To prevent malfunctions of the system

- There are no user-serviceable parts inside. If anything goes wrong, unplug the power cable and consult your dealer.
- Do not insert any metallic object into the system.

Note about copyright laws

Check the copyright laws in your country before recording from CDs. Recording of copyrighted material may infringe copyright laws.

Safety Precautions

Avoid moisture, water and dust

Do not place the system in moist or dusty places.

Avoid high temperatures

Do not expose the system to direct sunlight and do not place it near heating equipment.

When you are away

When away on travel or for other reasons for an extended period of time, disconnect the power cable plug from the wall outlet.

Do not block the vents

Blocking the vents may damage the system.

Care of the cabinet

When cleaning the system, use a soft cloth and follow the relevant instructions on the use of chemically-coated cloths. Do not use benzene, thinner or other organic solvents including disinfectants. These may cause deformation or discoloring.

If water gets inside the system

Turn the system off and disconnect the power cable plug from the wall outlet, then call the store where you made your purchase. Using the system in this condition may cause fire or electrical shock.

Notes on discs/files

Playable disc/file types

Playable discs ^{*1}	DVD VIDEO, DVD AUDIO, DVD VR ^{*3} , VCD, SVCD, CD, CD-R ^{*4} , CD-RW ^{*4} , DVD-R ^{*5, *6} , DVD-RW ^{*6} , +R, +RW
Playable files recorded on a disc ^{*1}	MP3, WMA, WAV, JPEG, ASF, DivX, MPEG1, MPEG2
Playable files recorded on a USB mass storage class device ^{*2}	

• Even though listed above, some types may be unplayable.

*1 Discs should be finalized before being played back.

*2 This system may not recognize some USB mass storage class devices. This system cannot play back a file whose data volume is more than 2 gigabytes and a file whose data transfer rate is more than 2 Mbps.

*3 DVD VR means a DVD-R/DVD-RW recorded in Video Recording (VR) format.

*4 A CD-R/CD-RW recorded in multi-session format (up to 20 sessions) is playable.

*5 A DVD-R recorded in multi-border format is also playable (except for dual layer discs).

*6 For files recorded on a DVD-R/DVD-RW, the disc should be formatted with UDF Bridge.

It is possible to play back finalized +R/+RW (DVD Video Format only) discs. "DVD" lights on the front display panel when a +R/+RW disc is loaded.

Some discs may not be played back because of their disc characteristics, recording conditions, or damage or stains on them.

Only sounds can be played back from the following discs:

MIX-MODE CD	CD-G
CD-EXTRA	CD TEXT

This system is designed for use with the NTSC standard.

Region code of DVD VIDEO

DVD VIDEO players and DVD VIDEO discs have their own region code numbers. This system can play back a DVD VIDEO whose region code number includes the system's region code, which is indicated on the rear panel.

Examples:



If a DVD VIDEO with an improper region code number is loaded, playback cannot start.

• **On some DVD VIDEOS, DVD AUDIOS, VCDs, SVCDs or DivX files, their actual operation may be different from what is explained in this manual. This is due to the disc/file programming and disc/file structure, not a malfunction of this system.**

Unplayable discs

- The following discs cannot be played back:
- DVD-ROM (except for MP3/WMA/JPEG/ASF/DivX/MPEG1/MPEG2 format), DVD-RAM, CD-ROM, CD-I (CD-I Ready), Photo CD, SACD, etc.
- Playing back these discs generates noise and may damage the speakers.
- Damaged discs and discs with an unusual shape (other than a disc of 12 cm or 8 cm ($4\frac{3}{4}$ " or $3\frac{3}{16}$ " in diameter) cannot be played back.
- JVC does not guarantee the operation and sound quality of discs not authorized by CD-DA, which is a CD specification.
Before playback, confirm that the disc complies with this CD specification by checking the marks and reading notes printed on the package.

Playable MP3/WMA/WAV/JPEG/ASF/DivX/MPEG1/MPEG2 discs/files

- CDs recorded in the ISO 9660 format are playable (except CDs recorded in the "packet write" format (UDF format)).
- Files with an extension of ".mp3", ".wma", ".wav", ".jpg", ".jpeg", ".asf", ".divx", ".div", ".avi", ".mpg", ".mpeg" or ".mod" (extensions with mixed cases are also acceptable) are playable.

Notes on MP3/WMA/WAV/JPEG/ASF discs/files

- A disc may not be played back, or reading it may take a long time depending on its recording conditions or properties.
- The time needed for reading varies with the number of groups or tracks (files) recorded on the disc.
- If characters other than single-byte alphanumeric characters are used in the file name of an MP3/WMA/WAV/JPEG/ASF file, the track/file name is not displayed correctly.
- The order of tracks/groups displayed on the MP3/WMA/WAV menu screen, and the order of files/groups displayed on the JPEG menu screen may be different from that of files/folders displayed on a computer monitor screen.
- Playing back an MP3/WMA file that contains a still image may take a long time. The elapsed time is not displayed until playback starts. This elapsed time may not be displayed correctly.
- For an MP3/WMA file, a disc with a sampling frequency of 44.1 kHz and transmission rate of 128 kbps is recommended.
- This system is not compatible with an MP3i or MP3PRO file.
- This system can play back a baseline JPEG file, excluding monochromatic JPEG files.
- This system can play back JPEG data taken with a digital camera conforming to the DCF (Design Rule for Camera File System) standard (when a function such as the automatic rotation function of a digital camera is applied, the data may no longer conform to the DCF standard, and the image may not be displayed).
- If data has been processed, edited or restored with computer image editing software, the data may not be displayed.
- This system cannot play back animations such as MOTION JPEG files, still pictures (TIFF etc.) other than JPEG files, or image data with sound.
- The resolution of 640 x 480 pixels is recommended for JPEG files. If a file has been recorded at a resolution of more than 640 x 480 pixels, it may take a long time to display the file. An image with a resolution of more than 8 192 x 7 680 pixels cannot be displayed.
- The system supports ASF files recorded with the maximum bit rate of 384 kbps and an audio coder decoder of G.726.
- A WAV file with a sampling frequency of 44.1 kHz and a quantization bit rate of 16 bits is recommended.

Notes on DivX discs/files

- The system supports DivX 5.x, 4.x and 3.11.
- The system supports DivX files with a resolution of 720 x 480 pixels or less (30 fps) and 720 x 576 pixels or less (25 fps).
- Audio streams should conform to MPEG1 Audio Layer-2, MPEG Audio Layer-3 (MP3) or Dolby Digital.
- The system does not support GMC (Global Motion Compression).
- Files encoded in the interlaced scanning mode may not be played back correctly.
- Playing back a DivX file may take a long time. The elapsed time is not displayed until playback starts. The elapsed time may also not be displayed correctly.

Notes on MPEG1/MPEG2 discs/files

- The stream structure of MPEG1/MPEG2 discs and files should conform to MPEG system/program stream.
- 720 x 576 pixels (25 fps)/720 x 480 pixels (30 fps) is recommended for the highest resolution.
- This system also supports the resolutions of 352 x 576/480 x 576/352 x 288 pixels (25 fps) and 352 x 480/480 x 480/352 x 240 pixels (30 fps).
- The profile and level should be MP@ML (Main Profile at Main Level)/SP@ML (Simple Profile at Main Level)/MP@LL (Main Profile at Low Level).
- Audio streams should conform to MPEG1 Audio Layer-2, MPEG2 Audio Layer-2 or Dolby Digital (MPEG2 files only).

Caution for DualDisc playback

The Non-DVD side of a "DualDisc" does not comply with the "Compact Disc Digital Audio" standard. Therefore, the use of Non-DVD side of a DualDisc on this product is not recommended.

Notes on files recorded on a connected USB mass storage class device

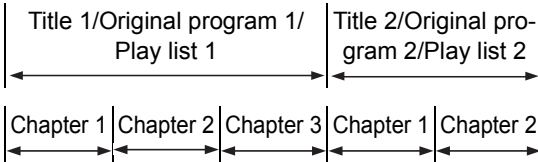
- This system is compatible with USB 2.0 Full-Speed.
- This system may not play back some USB mass storage class devices and some files.
- This system does not support DRM (Digital Rights Management).
- This system cannot recognize a USB mass storage class device whose rating exceeds 5V/500mA.
- When connecting a USB mass storage class device, refer also to its manual.
- When using a USB cable to connect a USB mass storage class device, the length of the cable should be less than 1 m (3'33").
- Connect the USB mass storage class device directly to the main unit without routing through a USB hub.
- Disconnect the USB mass storage class device after stopping playback or turning off this system.
- The main unit can charge a USB mass storage class device when the USB mass storage class device is selected as the source.
- You cannot record any sound on your USB mass storage class device using this system.
- Always set the volume to the minimum on this system when connecting or disconnecting a USB mass storage class device.
- JVC bears no responsibility for any loss of data on the USB mass storage class device while using this system.

Data hierarchy

DVD VIDEO/DVD VR

A DVD VIDEO consists of "titles" and each title may be divided into "chapters".

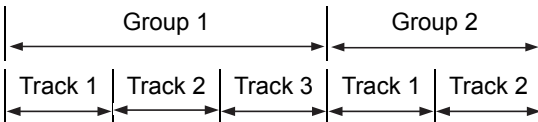
A DVD VR consists of "original programs" or "play lists" and each original program/play list may be divided into "chapters".



DVD AUDIO

A DVD AUDIO consists of "groups" and each group may be divided into "tracks".

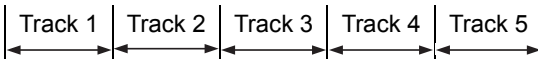
Some discs include a "bonus group" that requires a password for playback. (Refer to page 38.)



VCD/SVCD/CD

A VCD/SVCD/CD consists of "tracks".

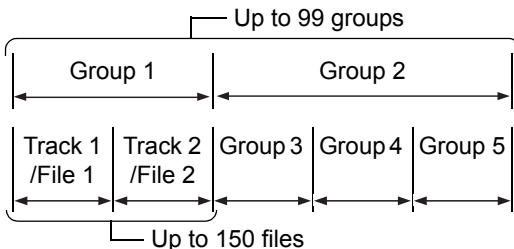
In general, each track has its own track number. (On some discs, each track may also be further divided by indexes.)



MP3/WMA/WAV/JPEG/ASF/DivX/MPEG1/MPEG2 files

Audio, still pictures and video are recorded as tracks/files on a disc or a USB mass storage class device. Tracks/files are usually grouped into a folder. Folders can also include other folders, creating hierarchical folder layers.

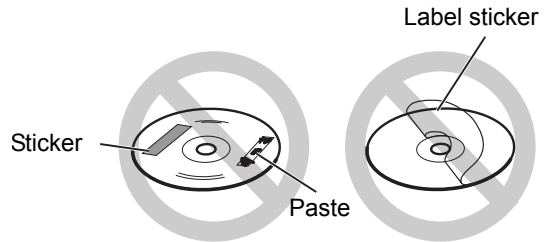
This system simplifies the hierarchical construction of files and manages folders by "groups".



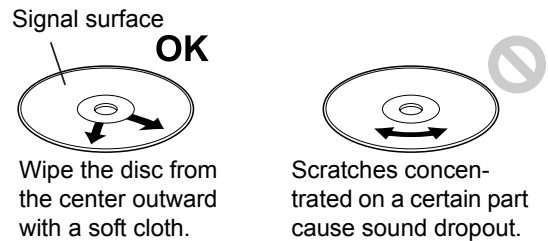
This system can recognize up to 4 000 tracks/files on a disc. Also, the system can recognize up to 150 tracks/files per group and up to 99 groups on a disc. Since the system ignores the tracks/files with numbers exceeding 150 and the groups with numbers exceeding 99, these cannot be played back. If there are any type of files other than MP3/WMA/WAV/JPEG/ASF/DivX/MPEG1/MPEG2 files on a disc, those files are also counted in the total number of files.

Handling discs

- Do not use a commercially-available non-standard shape disc (like a heart, flower or credit card, etc.), because it may damage the system.
- Do not use a disc with tape, stickers, or paste on it, because it may damage the system.
- Do not bend the disc.



Cleaning discs



- Be sure not to use thinners, benzenes, cleaners for analog records, or other chemical agents.

Troubleshooting

■ General

Problem	Possible cause	Possible solution	Reference page
Power does not come on.	The power cable is not connected to an AC outlet.	Connect the power cable correctly.	13
You cannot operate any button.	Some specific operations are restricted.	This is not a malfunction.	—
The remote control does not work.	The batteries are running low.	Replace the batteries.	5
You cannot operate the main unit using the remote control.	The remote control mode selector on the remote control is slid to [TV].	Slide the remote control mode selector to [AUDIO].	14
A whirring noise can be heard.	The main unit is located close to a TV, computer, or other electric appliance.	Place the main unit away from a TV, computer, or other electric appliance.	51
Playback starts suddenly.	QP LINK may be working. This is not a malfunction.	Select "QP LINK OFF".	46
No picture is produced.	Improper connection.	Connect all cables properly.	9
The picture is distorted.	A video cassette recorder is connected between the main unit and the TV.	Connect the main unit directly to the TV.	9
	The video signal type setting is not appropriate.	Select the video signal type suitable for your TV.	10
The screen size is abnormal.	The screen size setting is not appropriate.	Select the display method suitable for your TV.	42
The TV screen darkens.	The screen saver setting is activated.	Press any button.	—
No sound is produced.	The speakers are not connected correctly.	Connect the speakers correctly.	8
	Headphones are connected.	Disconnect the headphone plug.	36
	The sound is muted.	Restore the sound.	16
	If "NO AUDIO" is displayed in the display window, the disc may have been produced through illegal copying.	Check the disc at the store where it was purchased.	—
The sound is weak and can hardly be heard.	The audio level of the disc is low. (only for a DVD VIDEO/ DVD AUDIO)	Select the audio level.	37
The sound is distorted.	The volume is too high.	Turn down the volume.	16
A radio broadcast has interference from noise.	The antennas are not connected correctly.	Connect the antennas correctly.	7
A radio broadcast cannot be received.			

■ For a loaded disc

Problem	Possible cause	Possible solution	Reference page
A disc cannot be played back.	If "REGION CODE ERROR!" appears on the TV screen, the region code number of a disc is not compatible with this system. (only for a DVD VIDEO)	Confirm the region code number compatible with this system.	53
	If "CANNOT PLAY THIS DISC" appears on the TV screen, the disc cannot be played back with this system.	Confirm the disc type playable with this system.	53
	The disc is upside down.	Place the disc on the disc tray with the printed surface facing up.	21
	Moisture has condensed on the lens.	Leave the main unit turned on, wait for approximately 1 or 2 hours, and then operate the main unit.	51
You cannot change the audio language/subtitle language/view angle.	The disc/file does not contain multiple audio languages/subtitle languages/view angles.	If only one audio language/subtitle language/view angle is recorded on the disc, you cannot change the setting.	34
No subtitles are displayed.	The disc/file contains no subtitles.	If no subtitles are recorded on the disc/file, you cannot display subtitles.	34
	You have not selected the subtitle language.	Select the subtitle language.	34
"LR ONLY" is displayed in the display window. (only for a DVD AUDIO)	When you play back a track for which down-mixing is prohibited and with multi-channel sound, the left and right sounds are output directly as they are.	This is not a malfunction.	—
A certain point on the disc cannot be played back properly.	The disc is scratched or dirty.	Clean or replace the disc.	56
MP3, WMA, WAV, JPEG, ASF, DivX, MPEG1 or MPEG2 file cannot be played back.	The loaded disc may include files of different types (MP3, WMA, WAV, JPEG, ASF, DivX, MPEG1 or MPEG2).	Select "FILE TYPE". You can play back only the files of the types selected with "FILE TYPE". If the main unit has read the file before you make the "FILE TYPE" setting, reset "FILE TYPE" to the desired file type, and then reload the disc.	42
The disc cannot be ejected.	Disc ejection is locked.	Unlock the disc ejection.	18

■ For a connected USB mass storage class device

Problem	Possible cause	Possible solution	Reference page
Files on a USB mass storage class device cannot be played back.	If "CANNOT PLAY THIS DEVICE" appears on the TV screen, the files on a USB mass storage class device cannot be playable.	Confirm the playability of file types recorded on the USB mass storage class device.	53
MP3, WMA, WAV, JPEG, ASF, DivX, MPEG1 or MPEG2 file cannot be played back.	The connected USB mass storage class device may include files of different types (MP3, WMA, WAV, JPEG, ASF, DivX, MPEG1 or MPEG2).	Select "FILE TYPE". You can play back only the files of the types selected with "FILE TYPE". If the main unit has read the file before you make the "FILE TYPE" setting, reset "FILE TYPE" to the desired file type, and then disconnect the USB mass storage class device and connect it again.	42

If this system does not work properly despite the above "Possible solution"

Many functions of this system are controlled by microprocessors that can be reset by recycling the power supply. If pressing any button does not result in the normal action, disconnect the power cable from the outlet, wait for a while, and connect the power cable again.

Main unit (CA-EXA3)

Tuner

FM frequency: 87.5 MHz – 108.0 MHz
AM frequency: 530 kHz – 1 710 kHz

Terminal (front of the main unit)

- USB digital input terminal x 1
- Analog input terminal x 1
Stereo mini jack
- Analog output terminal x 1
Stereo mini jack
- Audio output headphone terminal x 1
Impedance: 16 Ω – 1 k Ω

Terminal (rear of the main unit)

- Composite video output terminal x 1
Y: 1.0 Vp-p, sync negative, 75 Ω terminated
- S-video output terminal x 1
Y: 1.0 Vp-p, sync negative, 75 Ω terminated
C: 0.286 Vp-p, sync negative, 75 Ω terminated
- Component video output terminals (3) x 1
Y: 1.0 Vp-p, sync negative, 75 Ω terminated
P_B: 0.7 Vp-p, 75 Ω terminated
P_R: 0.7 Vp-p, 75 Ω terminated
- Audio output subwoofer terminal x 1
500 mVrms/10 k Ω
- Optical digital output terminal x 1
–23 dBm to –15 dBm
- Optical digital input terminal x 1
–23 dBm to –15 dBm
- AV COMPU LINK terminal x 1
- Audio output terminals (2) x 1
500 mV/47 k Ω
- Audio input terminals (2) x 1
500 mV/47 k Ω
- FM antenna terminal x 1
- AM antenna terminal x 1
- Audio output speaker terminals (2) x 2
Output power: 80 W (40 W + 40 W) at 4 Ω
(1 kHz/10 % THD)
Impedance: 4 Ω – 16 Ω

USB

Compatible with USB 2.0 Full-Speed
Compatible device: USB mass storage class device
Compatible file system: FAT16, FAT32
USB output power: Max. 5 V/500 mA

General

Power source: AC 120 V $\sim$, 60 Hz
Power consumption (in operation): 28 W
Power consumption (on standby):
0.8 W (when the display window is turned off)
Dimensions (W x H x D): 245.6 mm x 103.8 mm x 283 mm
(9 $\frac{11}{16}$ " x 4 $\frac{1}{8}$ " x 11 $\frac{3}{16}$ ")
(including projecting parts)
Weight: 3.8 kg (8.4 lbs)

Speaker (SP-EXA3)

Type: 1-way bass reflex type
Magnetically shielded type
Speaker driver: 8.5 cm (3 $\frac{3}{8}$ ") wood cone
Power handling capacity: 40 W
Impedance: 4 Ω
Frequency range: 55 Hz – 20 kHz
Sound pressure level: 83 dB/W·m
Dimensions (W x H x D): 120 mm x 161 mm x 266.5 mm
(4 $\frac{3}{4}$ " x 6 $\frac{3}{8}$ " x 10 $\frac{1}{2}$ ")
(including projecting parts)
Weight (1 unit): 1.8 kg (4.0 lbs)

Supplied accessories

Remote control x 1
Batteries x 2
FM antenna x 1
AM loop antenna x 1
Speaker cables x 2
Composite video cable x 1

Designs and specifications are subject to change without notice.

TO OUR VALUED CUSTOMER —

THANK YOU FOR PURCHASING THIS JVC PRODUCT.
WE WANT TO HELP YOU ACHIEVE A PERFECT EXPERIENCE.

**NEED HELP ON HOW TO HOOK UP?
NEED ASSISTANCE ON HOW TO OPERATE?
NEED TO LOCATE A JVC SERVICE CENTER?
LIKE TO PURCHASE ACCESSORIES?**

JVC[®] IS HERE TO HELP!
TOLL FREE: 1(800)252-5722
<http://www.jvc.com>

Remember to retain your Bill of Sale for Warranty Service.

———— **Do not attempt to service the product yourself** ————

Caution

To prevent electrical shock, do not open the cabinet.
There are no user serviceable parts inside.
Please refer to qualified service personnel for repairs.



LIMITED WARRANTY

1-1 USA ONLY

ONLY FOR PRODUCT PURCHASED IN U.S.A.

JVC Americas Corp. (JVC) warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL RETAIL PURCHASER to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original purchase for the period shown below. ("The Warranty Period")

PARTS	LABOR
1 YR	1 YR

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN THE COMMONWEALTH OF PUERTO RICO.

WHAT WE WILL DO:

If this product is found to be defective within the warranty period, JVC will repair or replace defective parts with new or rebuilt equivalents at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products may be brought to a JVC authorized service center on a carry-in basis. Color televisions with a screen size of 27" or greater qualify for in-home service. In such cases, a technician will come to your home and either repair the TV there or remove and return it if it cannot be repaired in your home.

WHAT YOU MUST DO FOR WARRANTY SERVICE:

Please do not return your product to the retailer

Instead, return your product to the JVC authorized service center nearest you. If shipping the product to the service center, please be sure to package it carefully, preferably in the original packaging, and include a brief description of the problem(s). Please call 1-800-252-5722 to locate the nearest JVC authorized service center. Service locations can also be obtained from our website <http://www.jvc.com>. If your product qualifies for in-home service, the service representative will require clear access to the product.

If you have any questions concerning your JVC Product, please contact our Customer Care Center at 800-252-5722

WHAT IS NOT COVERED:

This limited warranty provided by JVC does not cover:

1. Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, defaced or removed;
2. Initial installation, installation and removal from cabinets or mounting systems.
3. Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
4. Damage that occurs in shipment, due to act of God, and cosmetic damage;
5. Signal reception problems and failures due to line power surge;
6. User Removal Memory Devices/Video Pick-up Tubes/CCD Image Sensors are covered for 90 days from the date of purchase;
7. Accessories;
8. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase);
9. Products used for commercial purposes, including, but not limited to rental.
10. Loss of data resultant from malfunction of hard drive or other data storage device;

There are no express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

JVC SHALL NOT BE LIABLE FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE, OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long an implied warranty lasts, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

JVC AMERICAS CORP.

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<http://www.jvc.com>

REFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY, THIS WARRANTY DOES NOT APPLY. FOR DETAIL OF REFURBISHED PRODUCT WARRANTY, PLEASE REFER TO THE REFURBISHED PRODUCT WARRANTY INFORMATION PACKAGED WITH EACH REFURBISHED PRODUCT.

For customer use:

Enter below the Model No. and Serial No. which is located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No. :

Serial No. :

Purchase date :

Name of dealer :

JVC

